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J. W. Barriger, President

A fleet of 45 General Motors Diesel units comprises the big majority of the motive power on the Hoosier line.

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS

La Grange, Illinois • Home of the Diesel Locomotive
In Canada: GENERAL MOTORS DIESEL LTD., London, Ontario

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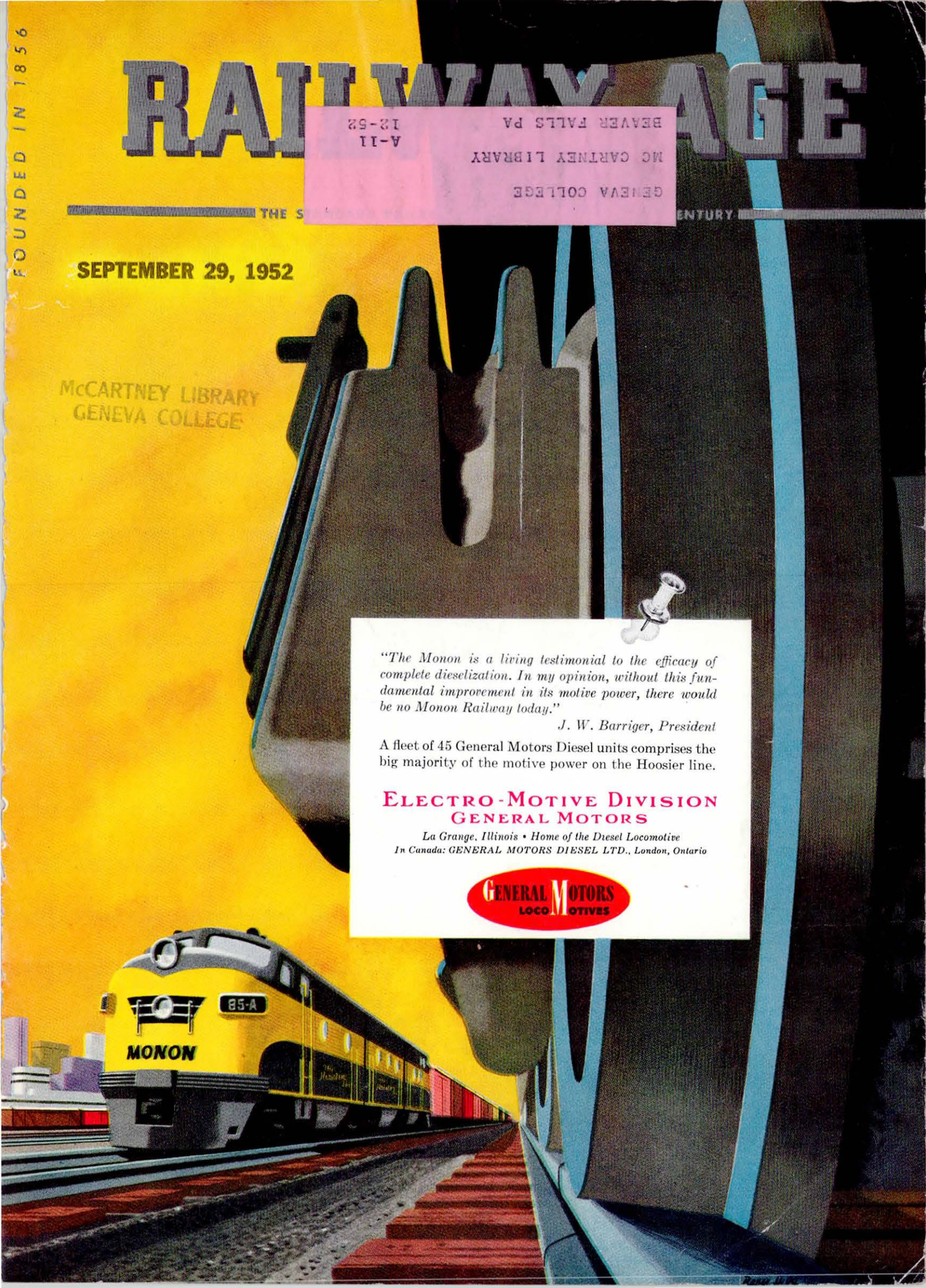


SOLID TRUSS means.....

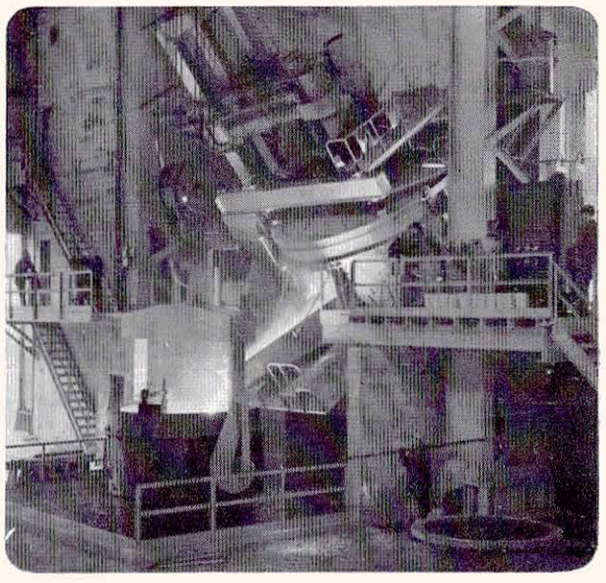
SOLID — END-TO-END!

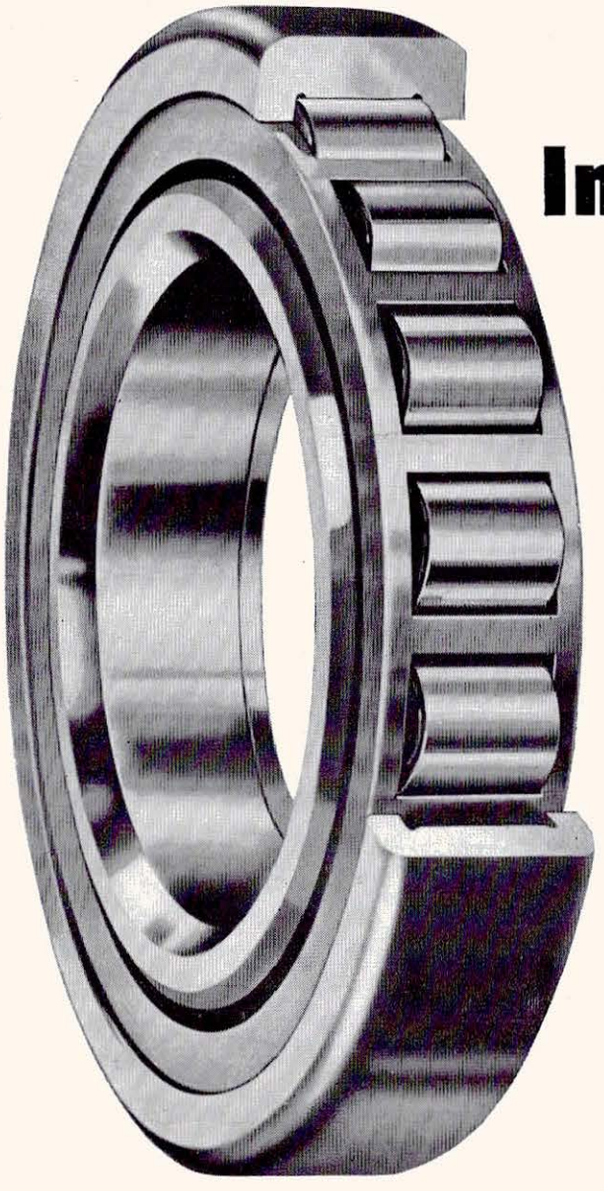
BUFFALO UNIT'S solid truss design is something more than a mere advertising slogan. In the early days, when UNIT was still on the drawing boards, one of the toughest nuts we had to crack was the problem of designing a brake beam which would carry the load on the ends extending out beyond the brake heads, for that is what every unit-type brake beam does under braking stress.

BUFFALO UNIT'S solid truss design licked that problem in the development stage—finally proved its worth with million-mile performance records in actual operation. Every BUFFALO UNIT solid truss brake beam now in service delivers its rated capacity from end to end, for the extended ends are integral parts of the truss structure of this pioneer of all unit-type brake beams.

BUFFALO BRAKE BEAM CO. **NEW YORK**

Electric Furnace Bearing Steel





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Getting rid of non-metallic inclusions is probably the toughest job that confronts any manufacturer of high-grade bearing steels. At Bethlehem we are able to hold inclusions to the minimum by using modern melting methods combined with rigid metallurgical control. And we test every heat at the critical stages of production. As a result of this painstaking care, Bethlehem bearing steels can meet the stringent requirements of the anti-friction bearing industry.

But just as important as our ability to turn out sound steel is our ability to rate or evaluate every heat according to the customers' standards. These standards often vary according to the sizes and bearing components to be manufactured.

Preliminary tests for inclusion ratings are taken by our mill technicians as soon as the billets are rolled. The extent and coverage of this examination is governed by the end use of the finished bearing.

Obviously, any final inspection rating which will be comparative can be realized only where there is a complete understanding between our metallurgists and the customer. Whether you use the 52100 types or low-carbon alloy carburized grades, we will be glad to give you further information on methods of rating, as well as analyses and properties.

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On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. *Export Distributor:* Bethlehem Steel Export Corporation

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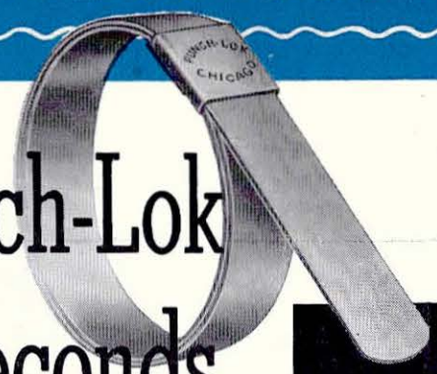
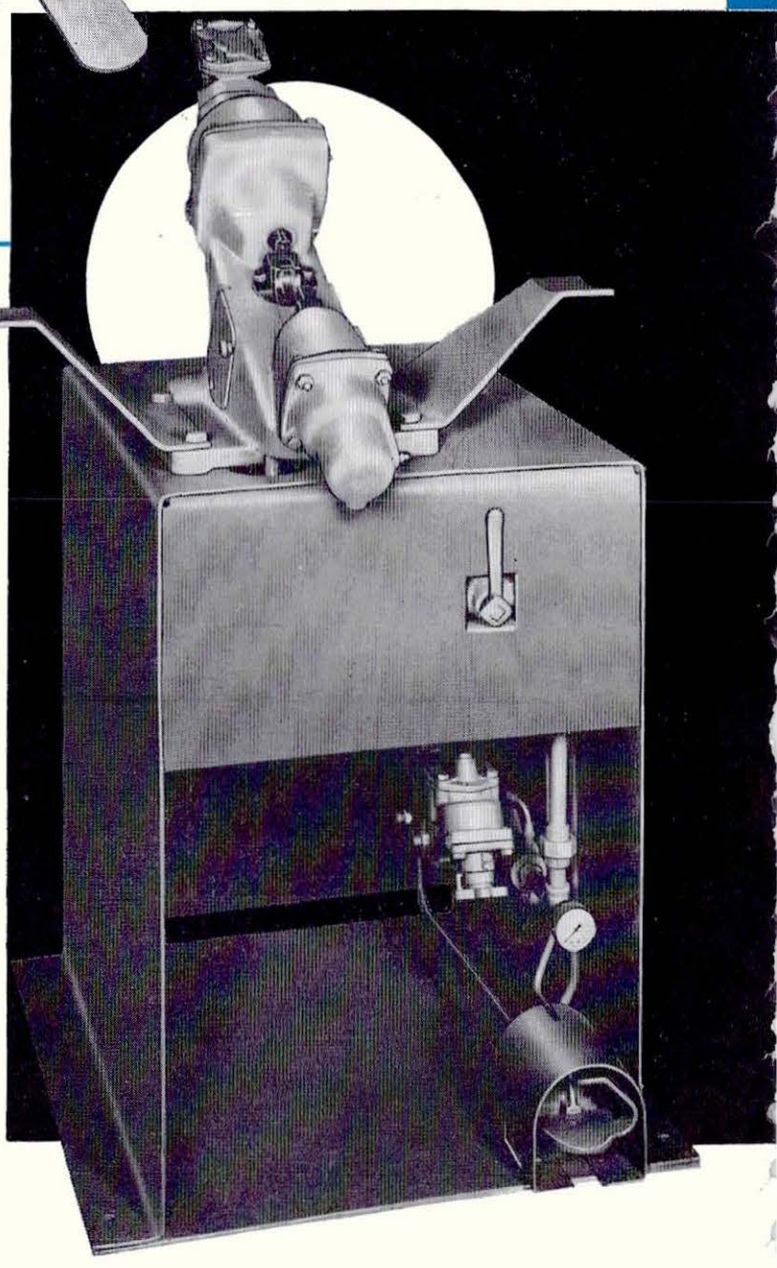
BETHLEHEM STEEL

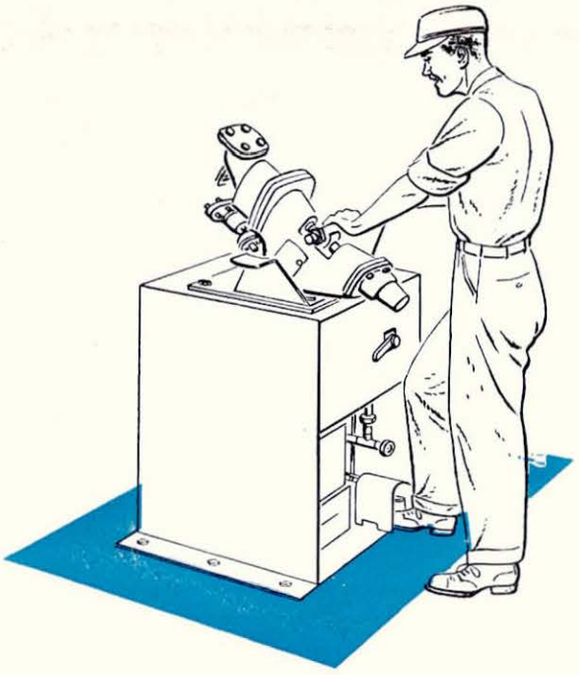
Apply Punch-Lok Hose Clamps in just 3 seconds



with the

Westinghouse Air Brake B-1 Clamping Machine





HERE is the quickest, and most economical way to apply hose clamps. In one operation, this new device pulls the hose clamp tight, locks it, and shears off the excess metal. Clamp tension is identical on every piece.

It's safe, too. The operator has a clear view of his work at all times because the table is conveniently sloped. And the foot pedal operating valve can be nullified at any point in the cycle, thus stopping the machine.

Get in touch with your Westinghouse Representative and see how easily the new B-1 can speed up production in *your* shop, and give you tighter, more uniform hose clamps.

Westinghouse Air Brake Company

AIR BRAKE DIVISION

WILMERDING, PA.

Vol. 133, No. 13 September 29, 1952

RAILWAY AGE

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. . . in <u>one</u> year!

with "UNION" C. T. C. saving 17,498 freight train miles

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2. The tonnage of through freight trains was increased 32%.
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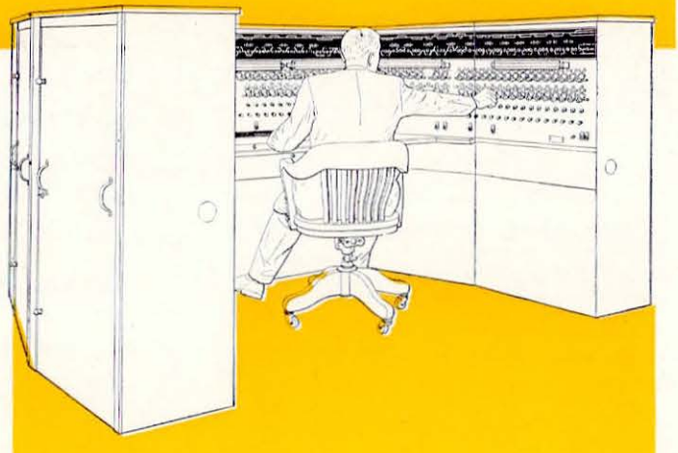
4. Saved 2,190 car days per year.
5. Eliminated two sidings and 5 main track switches.
6. Reduced cost of directing train movements.
7. Reduced annual operating expenses.
8. Increased capacity of line for future traffic.
9. Annual return over 3% interest:
   On Capital Investment—21.5%
   On Total Cost —19.9%

*Factual data will be supplied on request.



"UNION" Centralized Traffic Control can reduce terminal-to-terminal time with safety and pay its way through reductions in operating expenses. May we help you?

UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

SWISSVALE, PENNSYLVANIA

NEW YORK • CHICAGO • ST. LOUIS • SAN FRANCISCO

WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, seven months	
1952	$5,911,265,980
1951	5,854,235,231
Operating expenses, seven months	
1952	$4,634,987,983
1951	4,646,642,007
Taxes, seven months	
1952	$ 672,002,739
1951	645,095,748
Net railway operating income, seven months	
1952	$ 503,043,404
1951	443,128,736
Net income, estimated, seven months	
1952	$ 326,000,000
1951	278,000,000
Average price railroad stocks	
September 23, 1952	63.62
September 25, 1951	56.48
Car loadings, revenue freight	
37 weeks, 1952	26,281,649
37 weeks, 1951	28,615,434
Average daily freight car shortage	
September 20, 1952	5,096
September 22, 1951	3,198
Average daily freight car surplus	
September 20, 1952	14,968
September 22, 1951	14,504
Freight cars delivered	
August 1952	4,537
August 1951	7,183
Freight cars on order	
September 1, 1952	95,761
September 1, 1951	139,104
Freight cars held for repairs	
September 1, 1952	108,222
September 1, 1951	96,020
Average number railroad employees	
Mid-August 1952	1,219,257
Mid-August 1951	1,297,060

In This Issue . . .

NEW EQUIPMENT ORDERS for the week covered in this issue were few in number, but important in size, and significance. Largest was Santa Fe's purchase from Budd of 113 passenger-train cars, including some full-length dome coaches. Many of the new cars will go to re-equip all five units of the road's all-coach extra-fare "El Capitan." A Central of Georgia order for 24 diesels will, when completed, add that road to the ranks of those already fully dieselized. And the L&N prepared to plunk down some $9.3 million for 69,750 tons of rail and fastenings as a beginning on a comprehensive program of relaying nearly 2,000 miles of main track with 132-lb rail.

OCTOBER 1 will mark the 75th birthday of the freight-conscious Cotton Belt—a road with an interesting history and some equally interesting present-day operations. The high spots of both are covered in the article starting on page 31.

POSSIBILITIES OF APPLYING TELEVISION to some railroad uses were further explored at the Baltimore & Ohio Chicago Terminal's Barr yard on September 16 in a full-dress demonstration before some 500 observers from 35 railroads and 30 press representatives. Comment, says our news story on the event, was "mixed," but further studies of what TV can do look like an absolutely sure thing.

STEAM LOCOMOTIVES may be declining in relative importance on most railroads, but there are still going to be a lot of them in use for a long time to come; it's only common sense to use those as efficiently as possible. That's why the page 51 report from the N&W will be of interest to operating and mechanical officers on a lot of railroads.

"HOOSIER HOSPITALITY," as displayed by the Monon, is described and illustrated in the feature article which begins on page 39. It is another interesting example of that road's novel and energetic methods of winning business for itself and of promoting good will for the entire railroad industry.

In Washington . . .

FREIGHT SHIPPERS ARE SUBSIDIZING the railroads' current capital improvement program, as a result of the Interstate Commerce Commission's Ex Parte 175 rate increase decision, according to Dr. Ford K. Edwards,

WEEK AT A GLANCE

director of the Bureau of Coal Economics of the National Coal Association. Dr. Edwards' views, which include the contention that passenger and less-carload freight service deficits are also absorbed by charges on carload freight, are set forth in a pamphlet just released by the National Coal Association, which soon will be the subject of editorial comment in Railway Age.

THE NEXT FEW WEEKS—the traditional heavy loading season for railroad freight—are likely to produce average daily shortages of around 20,000 cars per day, or about the same as in October 1951. That is the inference to be drawn from the latest review of "The National Transportation Situation" by Arthur H. Gass, chairman of the A.A.R.'s Car Service Division. In it, Mr. Gass also points out that, during August, a delayed reaction from the steel strike put the railroads' freight car program into high speed—backwards!—with new car installations the lowest and old car retirements the highest "for any month in about two years." One bright spot was that repair programs cut down the number of bad-order cars enough to keep the serviceable fleet at its August 1 level of 1,732,000 units. For further detail, see the news columns.

. . . And Elsewhere

THE C&O'S CURRENT DIVIDEND is being shared with 1,572 new employee stockholders, the company has revealed in distributing a copiously illustrated report of its two 1952 stockholders' meetings. These new stockholders are employees who are buying stock through the employees' stock purchase plan, approved by other stockholders and by the I.C.C. last June. They have, the company says, subscribed for purchase of a total of 16,380 shares of its common stock; 94 employees have already completed full purchase of from one to five 10-share lots under the plan.

UNTIL "sound economic conditions" in railroad passenger transportation are achieved, the railroads "cannot do the best job of which they are basically capable," or "the job they would like to do," F. H. Baird, assistant vice-president, passenger traffic, of the New York Central, told the New England Shippers Advisory Board at Bretton Woods, N. H., on September 19. To achieve those "sound economic conditions" in the "enlightened self-interest" of shippers and "the general public good," Mr. Baird solicited the shippers' help in attainment of a seven-point program, details of which are set out in the news pages.

MAN BITES DOG! John V. Lawrence, managing director of American Trucking Associations, has proposed "an across-the-board increase in percentage of present gasoline and license taxes." He stipulates, of course, that the increases should "expire" at the end of "a given number of years," and should be accompanied by a prohibition on "diversion or dispersion" from highway purposes of highway user fees. Also, the larger taxes would be a "substitute" for toll highways; and, more importantly, their expenditure would be limited by statute to "a definite system of improvement of named primary highways and urban streets of importance to the primary system"—presumably the highways and streets which are most important to the truckers whom Mr. Lawrence represents. But the real joker in the whole proposition is that it would continue to impose on private motorists and operators of small trucks the bulk of the added highway taxes needed to provide the kind of roads the big truckers want!

"TRAFFIC, DEPRESSED TEMPORARILY by the steel strike, will rebound sharply in coming months, barring a mine walkout. Good volume is likely well into 1953. Revenues will be higher, reflecting freight rate increases, effective since May. . . . Expenses have been closely controlled, in spite of higher unit wage and material costs." That, according to a recent Standard & Poor's railroad survey, is the optimistic post-steel strike outlook for the industry. Aggregate 1952 net income, the investment analysis firm believes, "will be well above the $693 million of last year."

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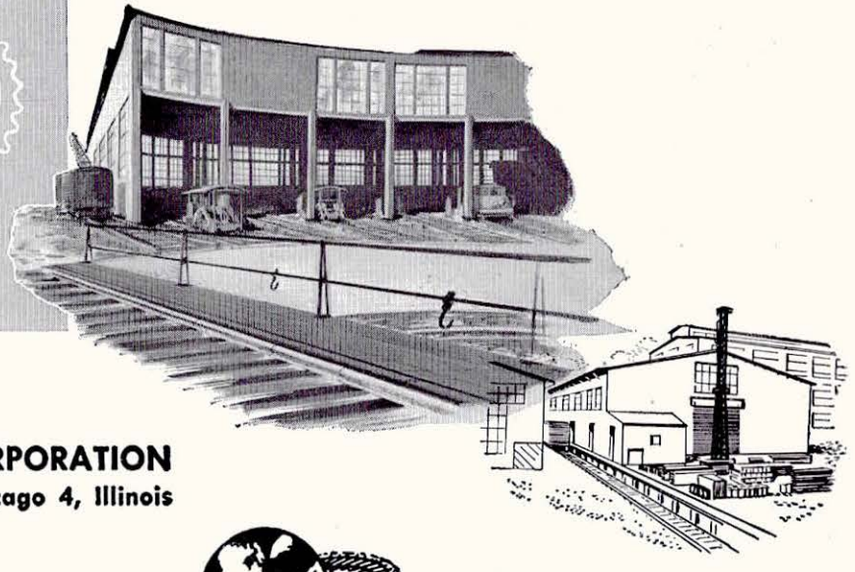
Fast, efficient service and parts supply from these assembly and stand-by plants in Warwick, N. Y. Our service engineers make periodic road checks of all equipment.



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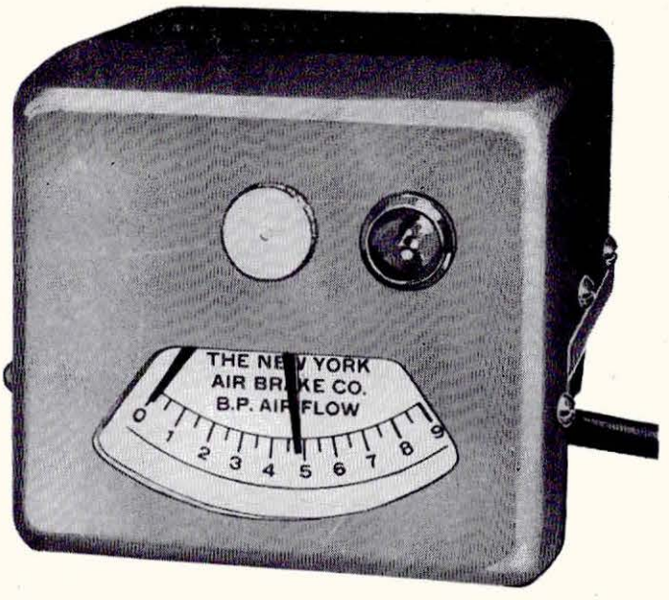


Can Tell You . . .

That something has happened to change radically the normal equilibrium of brake pipe pressure in a charged brake system. *This can mean that:*

- The conductor is making a brake application.
- The train has broken in two.
- The brake pipe leakage has increased

OR

It Can Tell You

That flow into the brake pipe of newly made-up trains is excessive. *This can mean that:*

- The train system leakage is excessive.
- The brake test can not be made.

Mounted in the locomotive cab. Available for operation on 32 volts or 64 volts. *Write for complete information.*

The New York Air Brake Company

420 Lexington Ave., New York 17, N.Y. Plant: Watertown, N.Y.

WHEN SNOW FLIES...
Be Prepared With COMMONWEALTH
PILOT SNOW PLOWS

COMMONWEALTH One-Piece Pilot Snow Plows applied to diesel road locomotives have proved of great value in keeping rails clear of drifting snow without the costly repeated use of large snow plow equipment.

These rugged cast steel pilot plows can be easily applied, removed and reapplied. Also, as a permanent application, they help solve year round operating problems by serving as strong deflecting pilots which clear the way of objects, substantially reducing the possibility of accidents or derailments. They may be used without interference with normal coupling operations.

Act now to reduce your next winter's operating costs with COMMONWEALTH One-Piece Cast Steel Pilot Snow Plows.

Large numbers of **COMMONWEALTH** *pilot snow plows of special design have also been applied to Diesel switchers and road switchers.*

Commonwealth Pilot Snow Plow applied to Road Locomotive

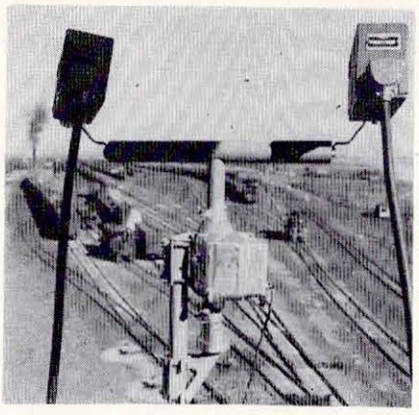
Commonwealth Cast Steel Pilot Snow Plow

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. **EDDYSTONE, PA.**

W. C. Baker, vice-president of the B&O, at the fixed camera placed at the yard entrance.

A. S. Hunt, chief engineer, communications and signals, watches yard operations by TV camera.



Television cameras mounted on the yard tower are on a revolving mast controlled from the yard office.

from side to side, or up and down. One camera was focused for a long-range view down the yard, and the other was focused to view territory adjacent to the tower.

There were three home receivers in the yard office, each reproducing the picture picked up by one of the cameras. Thus, a man in the yard office could see the numbers of cars entering the yard, view the entire yard, or see the yard adjacent to the tower.

The monitors, from which the cameras are controlled, were located in the base of the tower, for the two cameras atop the tower, and in a truck parked near the camera focused on the entering yard lead.

The B&O held a special luncheon for members of the press at the Union League Club in Chicago, at which they met representatives of the railroad and of RCA-Victor. W. C. Baker, B&O vice-president in charge of operations and maintenance, envisioned numerous other railroad applications of television, and said the medium may play an important role in railroading of the future.

"The object of today's experiment," Mr. Baker said, "is to determine whether industrial television will be able to contribute to greater efficiency in operations of a railroad classification yard.

"Someone once said that a railroad is no better than its communications. And the better its communications, the better the railroad. If this is true, then the great new communications medium of television should have an important role to play in railroading of tomorrow."

Speaking for RCA-Victor, W. W. Watts, vice-president in charge of the RCA engineering products department, reported that railroading is the newest and one of the most challenging of a growing list of industrial and scientific fields in which television promises increased efficiency, improved products and services, and elimination of risks and hardships for human observers.

A. S. Hunt, the B&O's chief engineer for communications and signals, presided at the luncheon, and Raymond J. Miller, RCA industrial television field representative, described features of the RCA Vidicon system.

Simple Equipment Used

The new RCA Vidicon equipment is designed to afford maximum simplicity, compactness and ease of operation; good picture quality, and low-cost operation, Mr. Miller said. The system consists of only two units—a small, lightweight camera, about the size of a 16-mm. home movie camera, and a combination monitor-power supply-control unit housed in a luggage-type case smaller than a home table model TV.

The equipment is designed around a new RCA camera tube, the Vidicon, which is only one inch in diameter and six inches long, yet is almost as sensitive as the much larger studio-type Orthicon tube. The camera uses only two other tubes, and the entire industrial TV system uses only 22 tubes, compared to the 60 now needed for a broadcast studio camera chain. Scanning frequencies of the new system are the same as those of standard broadcast television.

Comment "Mixed"

Comment among railroaders present was "mixed." Some expressed the opinion that TV had definite possibilities, while others felt that its uses were strictly limited. One man expressed the view that it might be worthwhile for a railroad to purchase a camera and monitor, and take them around the railroad to see what could be done with them. But others reserved judgment until further tests have been conducted.

Freight Car Program Moved Backwards Fast in August, Gass Report Shows

In August, the railroads' freight car program "picked up considerable speed in the retrograde movement begun in July."

That's how Chairman Arthur H. Gass of the Car Service Division of the Association of American Railroads put it in his latest review of "The National Transportation Situation." This, he explained, was the result of "the lowest installations and highest retirements for any month in about two years."

August deliveries to Class I roads and their car-line affiliates totaled 3,924 cars, a showing which reflected effects of "exhausted steel supplies following the eight-week strike." August retirements totaled 7,000 cars, so total ownership on September 1 was 3,076 cars less than the August 1 total—1,840,623, compared with 1,843,699.

Meanwhile, however, the serviceable fleet was maintained at the August 1 level of 1,732,000 cars because August repair programs reduced the bad-order total by an amount sufficient to offset the loss in ownership. "The number of serviceable cars is now about 10,000 greater than on September 1, last year, but it is 6,000 less than at the beginning of this year," Mr. Gass also reported.

Asks "Best Possible Utilization"

He went on to say it appeared that the car supply during the heavy loading period in October "will be approximately the same as in October 1951 when shortages reached a peak of 20,000 cars per day." Because October traffic will "equal or exceed" that of October 1951, Mr. Gass called for the "best possible car utilization by all concerned."

As to August orders for freight cars, Mr. Gass reported that Class I roads and their car-line affiliates ordered during the month additional new freight cars "in about the same volume as new car deliveries, thus maintaining an

WHEN SNOW FLIES...
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PILOT SNOW PLOWS

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Commonwealth Pilot Snow Plow applied to Road Locomotive

Commonwealth Cast Steel Pilot Snow Plow

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. **EDDYSTONE, PA.**

You can put the Brakes on Beam Maintenance Costs!

Don't take it for granted that high maintenance costs are a necessary brake beam evil. Over a billion car-miles with ASF Cast-Steel Unit Beams have proved just the opposite—and now you can get the economy of this same one-piece construction in hanger-type beams, too!

THROUGH LESS MAINTENANCE . . .

Instead of eight or more parts per beam, here's a rigid, one-piece casting that *stays* rigid. Insures a positive linkage—with nothing to flex or work loose. False piston travel is eliminated. Fulcrum and heads are cast integral . . . and permanently positioned. In short, the only adjustment of the ASF Hanger-Type Beam ever required is to compensate for brake shoe wear!

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The higher strength of a heavily "beefed up" casting means higher safety, and it also means *longer life*. Performance of thick metal sections is unaffected by corrosion. And service life can be extended almost indefinitely . . . worn surfaces can easily be built up by welding; burned heads renewed by welding on new facings.

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The longer life and lower-cost maintenance of the service-proved ASF Cast-Steel Unit Beam add up to one thing: *fewer dollars spent keeping cars "on-line."* Your ASF representative can give you the facts on how the same low-cost dependability applies to the new *ASF Hanger-Type Beam*. Write us today.

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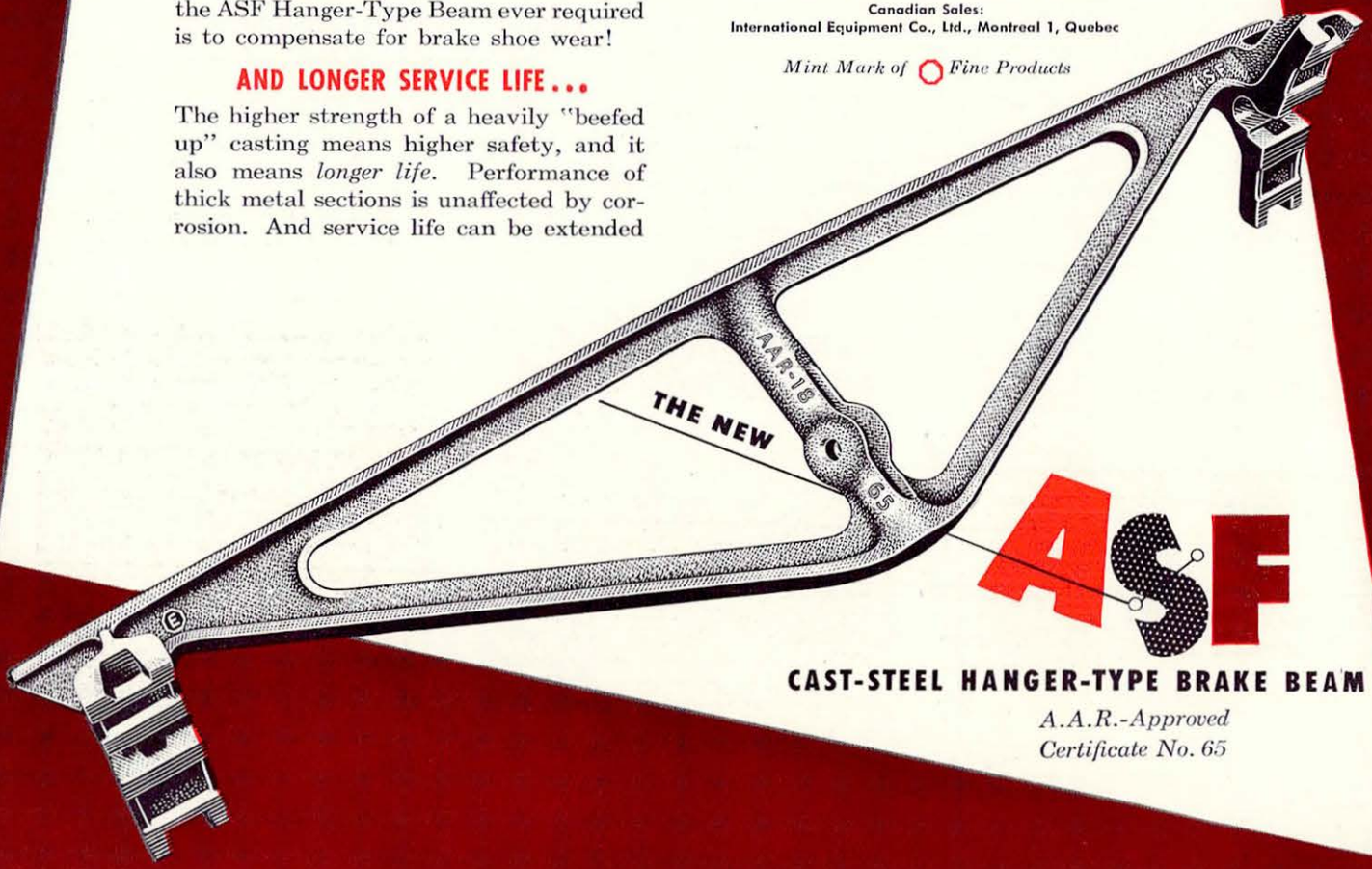

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Certificate No. 65

Yard Operations Televised at B&O's Barr Yard

Five hundred men from 35 railroads and 30 press representatives witness second experimental demonstration of television

The railroads are looking into television!

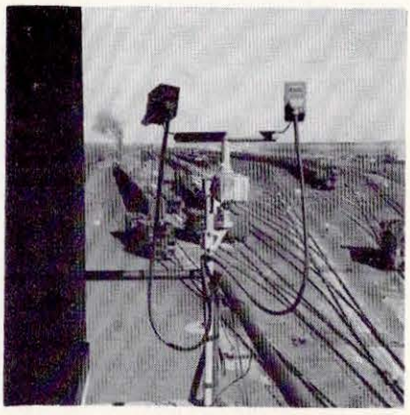
This new method of communication, which has caught the fancy of the American public and has had some industrial applications, was demonstrated before the railroad industry on September 16 at the Baltimore & Ohio's Barr yard near Chicago.

This was the second experimental demonstration of uses of television in railroading. It all began at the June convention of the American Association of Railroad Superintendents, where the RCA-Victor Division of the Radio Corporation of America staged an exhibit of industrial television equipment. A few members of the convention expressed interest in the exhibit, which led Raymond J. Miller, development engineer for RCA-Victor, to make inquiries as to television's possible uses on railroads. At this point a representative of *Railway Age* met Mr. Miller, and offered assistance in bringing television and railroads together. G. Murray Campbell, vice-president of the B&O, learned of the situation, and immediately volunteered the services of that company and the use of its flat-switching Barr yard for an experimental demonstration of television.

The first demonstration, described in *Railway Age* August 18, page 52, attracted such interest that the B&O and RCA-Victor decided to put on a second and more general showing of television's possible railroad applications. To it, some 500 men from 35 railroads and 30 members of the press were invited. The demonstration was a day-long affair, with equipment in operation from 10 a.m. to 4:30 p.m.

Three Demonstration Units

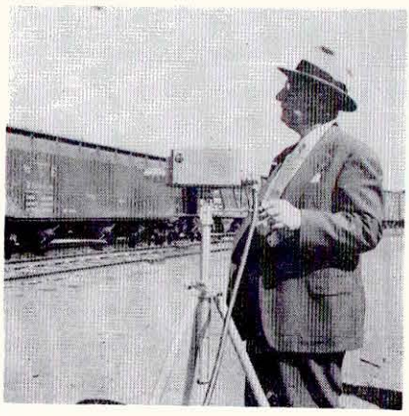
RCA-Victor spotted a fixed camera at the west end yard entrance focused to pick up car numbers. Two other cameras, atop the 60-ft. west tower, were mounted on a revolving mast operated by remote control from the yard office. A man in the yard office could control the mast to swing these two cameras



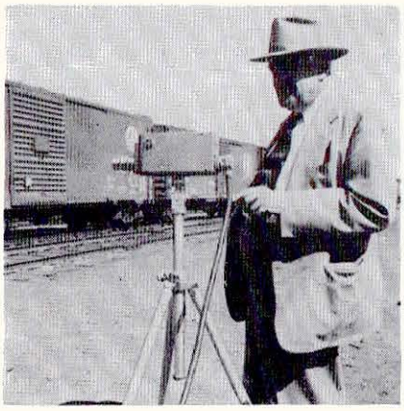
Television cameras mounted atop yard tower are focused to give long- and short-range views of Barr yard.

G. M. Campbell views operations at the fixed camera focused on cars entering the west end of the yard.

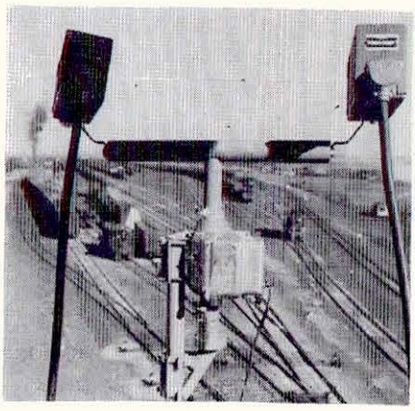
B&O yard clerk Harold DeYoung records freight car numbers from the television screen in the yard office.



W. C. Baker, vice-president of the B&O, at the fixed camera placed at the yard entrance.



A. S. Hunt, chief engineer, communications and signals, watches yard operations by TV camera.



Television cameras mounted on the yard tower are on a revolving mast controlled from the yard office.

from side to side, or up and down. One camera was focused for a long-range view down the yard, and the other was focused to view territory adjacent to the tower.

There were three home receivers in the yard office, each reproducing the picture picked up by one of the cameras. Thus, a man in the yard office could see the numbers of cars entering the yard, view the entire yard, or see the yard adjacent to the tower.

The monitors, from which the cameras are controlled, were located in the base of the tower, for the two cameras atop the tower, and in a truck parked near the camera focused on the entering yard lead.

The B&O held a special luncheon for members of the press at the Union League Club in Chicago, at which they met representatives of the railroad and of RCA-Victor. W. C. Baker, B&O vice-president in charge of operations and maintenance, envisioned numerous other railroad applications of television, and said the medium may play an important role in railroading of the future.

"The object of today's experiment," Mr. Baker said, "is to determine whether industrial television will be able to contribute to greater efficiency in operations of a railroad classification yard.

"Someone once said that a railroad is no better than its communications. And the better its communications, the better the railroad. If this is true, then the great new communications medium of television should have an important role to play in railroading of tomorrow."

Speaking for RCA-Victor, W. W. Watts, vice-president in charge of the RCA engineering products department, reported that railroading is the newest and one of the most challenging of a growing list of industrial and scientific fields in which television promises increased efficiency, improved products and services, and elimination of risks and hardships for human observers.

A. S. Hunt, the B&O's chief engineer for communications and signals, presided at the luncheon, and Raymond J. Miller, RCA industrial television field representative, described features of the RCA Vidicon system.

Simple Equipment Used

The new RCA Vidicon equipment is designed to afford maximum simplicity, compactness and ease of operation; good picture quality, and low-cost operation, Mr. Miller said. The system consists of only two units—a small, lightweight camera, about the size of a 16-mm. home movie camera, and a combination monitor-power supply-control unit housed in a luggage-type case smaller than a home table model TV.

The equipment is designed around a new RCA camera tube, the Vidicon, which is only one inch in diameter and six inches long, yet is almost as sensitive as the much larger studio-type Orthicon tube. The camera uses only two other tubes, and the entire industrial TV system uses only 22 tubes, compared to the 60 now needed for a broadcast studio camera chain. Scanning frequencies of the new system are the same as those of standard broadcast television.

Comment "Mixed"

Comment among railroaders present was "mixed." Some expressed the opinion that TV had definite possibilities, while others felt that its uses were strictly limited. One man expressed the view that it might be worthwhile for a railroad to purchase a camera and monitor, and take them around the railroad to see what could be done with them. But others reserved judgment until further tests have been conducted.

Freight Car Program Moved Backwards Fast in August, Gass Report Shows

In August, the railroads' freight car program "picked up considerable speed in the retrograde movement begun in July."

That's how Chairman Arthur H. Gass of the Car Service Division of the Association of American Railroads put it in his latest review of "The National Transportation Situation." This, he explained, was the result of "the lowest installations and highest retirements for any month in about two years."

August deliveries to Class I roads and their car-line affiliates totaled 3,924 cars, a showing which reflected effects of "exhausted steel supplies following the eight-week strike." August retirements totaled 7,000 cars, so total ownership on September 1 was 3,076 cars less than the August 1 total—1,840,623, compared with 1,843,699.

Meanwhile, however, the serviceable fleet was maintained at the August 1 level of 1,732,000 cars because August repair programs reduced the bad-order total by an amount sufficient to offset the loss in ownership. "The number of serviceable cars is now about 10,000 greater than on September 1, last year, but it is 6,000 less than at the beginning of this year," Mr. Gass also reported.

Asks "Best Possible Utilization"

He went on to say it appeared that the car supply during the heavy loading period in October "will be approximately the same as in October 1951 when shortages reached a peak of 20,000 cars per day." Because October traffic will "equal or exceed" that of October 1951, Mr. Gass called for the "best possible car utilization by all concerned."

As to August orders for freight cars, Mr. Gass reported that Class I roads and their car-line affiliates ordered during the month additional new freight cars "in about the same volume as new car deliveries, thus maintaining an

order backlog [78,825 cars] approximately equivalent to production during the past 12 months."

As to August locomotive orders, Mr. Gass reported that they "dropped to a two-year low as the new orders were offset by cancellations." Locomotives on order September 1 totaled 999, including 976 diesel and 23 steam.

Situation by Types

In his usual review of equipment conditions by types of cars, Mr. Gass gave first place to open-top cars. There he reported that shortages at mines had been "widespread" in the latter part of August, when loadings became "quite heavy" in view of the "possibility of work stoppage." Such a possibility seems to have been removed by new wage and working agreements between coal producers and the United Mine Workers.

As to closed cars, Mr. Gass reported that the supply "has not kept pace with the increasing demands." He added that, "if the heavy seasonal movements are going to be met successfully, it behooves all parties involved in this transportation task to take all possible action to bring about increased efficiency in car handling."

Freight car detention reports from shipper car efficiency committees indicated that cars detained beyond the free time of 48 hours averaged 16.34 per cent of those placed in August. That compared with 23.08 per cent in July, a showing which Mr. Gass' previous report attributed to the "many strikes and shutdowns" then in effect. The detention figure for the first eight months of this year was 16.44 per cent.

August reports from railroad agents showed that consignees, during that month, left 1,511 cars with dunnage, steel strapping and other debris after unloading.

Hutchins and Baird Outline to New England Shippers Programs to "Revitalize" Rails, Equalize Competition

Two programs—one to "revitalize" the railroad industry and "give us the freedom of action any business must have," and one to "foster sound economic conditions" in railroad passenger transportation—were presented to the New England Shippers Advisory Board at its September 17-19 meeting at Bretton Woods, N. H. The first program was outlined by Curtis M. Hutchins, president of the Bangor & Aroostook; the second by F. H. Baird, assistant vice-president, passenger traffic, of the New York Central.

Mr. Hutchins advocated as "a definite program," supported by all eastern railroads:

"(1) That Congress should pass legislation to compel the Interstate Commerce Commission to grant rate increases promptly after [railroads] have been subjected to substantial cost increases;

"(2) That the rule of rate making in the Interstate Commerce Act should be amended to eliminate the obligation on the part of the I.C.C. to consider the effect of rate increases on volume of traffic;

"(3) That the long-and-short-haul clause should be repealed;

"(4) That [railroads] should have the right to appeal to the I.C.C. on abandonment proceedings denied to them in the states;

"(5) That contract carriers should be required to file and make public rates they actually charge;

"(6) That exemption from regulation granted agricultural products and fish . . . should be confined to local areas, for transportation to the nearest market or loading point;

"(7) That parcel post rates should be increased to cover the cost of carrying it; and

"(8) That each segment of the transportation industry should pay its full share of facilities furnished by the government."

In support of his contention that "this eight-point program is not an unreasonable one and that agreement in general can be reached on most of it by objective thinkers," Mr. Hutchins cited the recent Transportation Association of America report (*Railway Age*, June 2, page 95). "Progress," he declared, "is definitely being made," but the railroads still need "constructive criticism" and "active assistance" from shippers in achieving it.

The program, he said, was presented as part of "a determined and intelligent effort" by the railroads "to make our plight clear to our customers, to governmental agencies and to the public. This effort is based on the perfectly valid premises that our railroad system is an essential carrier of the goods which we must have to support our standard of living and defend that standard of living against outside aggressors; and that this system must not be allowed to dwindle away into bankruptcy and inefficiency, nor should it be taken from us and run as a government enterprise, with its inevitable inefficiency and ineffectiveness."

Further excerpts from Mr. Hutchins' speech will be published in an early issue of *Railway Age*.

Passenger Service Economics

Mr. Baird's program, "to change the national transportation policy in the public interest, to eliminate 'favorites' and to secure equality of treatment for all," proposed that shippers:

"(1) Recognize the need for sound economics in rail passenger transportation as essential to the public interest;

"(2) Recognize that continued operation of money-losing passenger service is uneconomic;

"(3) Recognize that continued large passenger service deficits inevitably create a trend toward greater federal control and eventually government subsidy or operation of railroads;

"(4) Advocate elimination of government subsidies to public transportation;

"(5) Accept the principle that the overall public interest takes precedence over the narrower self-interest of particular groups;

"(6) Foster revision and modernization of the national transportation policy to take cognizance of the present highly competitive nature of the transportation industry; and

"(7) Recognize the reasonableness of discontinuing deficit passenger train service."

Earlier in his address, which he described as a "realistic" appraisal of the railroads' passenger problem, Mr. Baird had outlined what the railroads are doing to improve service through provision of new equipment and facilities, and better scheduling and merchandising of passenger operations.

Hits Air Line Subsidies

He had also summarized the difficulties encountered in discontinuing money-losing trains, and had discussed at length subsidies to air lines, which, he said, include not only "extra money paid for flying mail," but "an annual free gift, worth millions of dollars, in the use—for barely nominal fees—of airports built with federal, state and local funds," and "the benefit of a half-billion-dollar airways and communications system built and maintained by the federal government," which "serves for them the same purpose that our right-of way and signaling and communications systems do for us."

"All this," he stated, "is undoubtedly very pleasant for the air lines. Short range, it is pleasant for the relatively small segment of the population using them. But for the whole body of taxpayers, for the railroads, and—long range—for the entire economy, it is basically unsound. The railroads remain essential for large-scale transportation of passengers, just as for freight; to weaken them for their vital role by imposing artificial handicaps for the advantage of a competitor is to tinker dangerously with natural and inexorable laws of economics. . . .

"Certainly the time has come to take a long, hard look at the millions that are going into subsidy of commercial air carriers. . . There is a serious question as to whether continuing huge subsidies to commercial air lines is an effective means of advancing military aviation. And beyond question is the fact that these subsidies are operating to weaken another essential member of the defense team—the railroads."

Freight Car Loadings

Loadings of revenue freight in the week ended September 20 totaled 873,559 cars, the Association of American Railroads announced on September 25. This was a decrease of 7,659 cars, or 0.9 per cent, compared with the prev-

ious week; an increase of 9,869 cars, or 1.1 per cent, compared with the corresponding week last year; and an increase of 3,030 cars, or 0.3 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended September 13 totaled 881,218 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, September 13

District	1952	1951	1950
Eastern	144,747	138,164	148,662
Allegheny	176,515	172,043	174,869
Pocahontas	69,718	67,674	66,190
Southern	136,722	129,798	133,335
Northwestern	150,621	148,807	143,527
Central Western	136,921	131,216	135,248
Southwestern	65,974	63,110	64,827
Total Western Districts	353,516	343,133	343,602
Total All Roads	881,218	850,812	866,658
Commodities:			
Grain and grain products	48,115	53,381	50,218
Livestock	12,671	14,090	12,857
Coal	177,363	154,437	159,812
Coke	14,368	15,760	15,319
Forest products	48,864	48,569	49,401
Ore	96,461	85,770	82,571
Merchandise l.c.l.	74,616	75,454	90,035
Miscellaneous	408,760	403,351	406,445
September 13	881,218	850,812	866,658
September 6	746,044	732,769	751,449
August 30	727,344	829,481	851,841
August 23	834,120	838,587	838,665
August 16	805,704	829,398	851,240
Cumulative total 37 weeks	26,281,649	28,615,434	26,748,144

In Canada.—Carloadings for the seven-day period ended September 7 totaled 73,758 cars, compared with 109,979 cars for the previous 10-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
September 7, 1952	73,758	31,315
Cumulative Totals		
September 7, 1952	2,803,521	1,204,549

"Open House" at Pullman-Standard Research Lab

A large group of railway officers, railway supply representatives and members of the press were given a personally conducted tour through research and development facilities of the Pullman-Standard Car Manufacturing Company at Hammond, Ind., on September 12. Led by Director O. C. Maier and members of his staff, the group saw how pre-testing improves basic car design, and glimpsed some of the company's long-range development projects.

Impact tests—in which a box car, carrying a predetermined load, was struck by a fully-loaded hopper car at speeds up to 18 m.p.h., by means of an inclined track—received considerable attention. Forces of the impact and the stresses they set up, acceleration, and other pertinent data were recorded by a dynamometer coupler, strain gages, accelerometers, oscillographs and other modern test equipment as the group watched.

The research model "Train X" coach, built for the Chesapeake & Ohio, and recently given extensive road tests (*Railway Age*, June 23, page 17), was another exhibit that received wide attention. Director Maier and his staff also demonstrated high-speed, submerged-arc welding, a development expected to speed production while improving the quality of welding by reducing shrinkage and residual stresses. Other demonstration exhibits included the testing of freight car floors; static load testing of a passenger car side frame; fatigue tests of a covered hopper car; use of an analog computer to solve problems of car impact; and use of high-speed ("slow motion") motion picture cameras to study action of car parts under dynamic test conditions.

Delayed Steel Deliveries Slow Locomotive Program

The National Production Authority was advised last week by its Locomotive Builders Industry Advisory Committee that the industry's inability to get sufficient quantities of structural and heavy-plate steel was throwing the locomotive program "out of kilter."

The committee's report was made at a September 23 meeting, the proceedings of which were summarized in an N.P.A. statement. The statement reported that the builder representatives had told of delays in steel deliveries which were "holding pack output of locomotives, causing labor layoffs and restricting production scheduling to no more than two or three weeks ahead of time."

"Except for the scarcity of structurals and heavy sheared plates," the N.P.A. statement also said, "the committee agreed the materials situation generally is satisfactory. Locomotive builders reported no copper or aluminum worries, although N.P.A. officials warned that these metals, despite their greater abundance in recent months, may become tighter."

The "N.P.A. officials" were also reported to have said that "the locomotive-building industry, like all other steel consumers, can expect no supply and demand balance in steel until the second quarter of 1953." It was explained in this connection that the steel strike had set back deliveries to the point where the mills, in January and February, will be rolling steel ordered with C.M.P. (Controlled Materials Plan) tickets for this year's fourth quarter. Thus, tickets authorized for 1953's first quarter will not be honored until the last month of that quarter.

I.C.C. Creates Position Of Executive Director

The fact that the Interstate Commerce Commission has created the position of executive director was revealed by Commissioner Anthony F. Arpaia in a September 17 address to the Metropolitan Chapter of the Interstate Commerce Commission Practitioners at New York.

"The swelling tide of criticism of the commission," Mr. Arpaia told the practitioners, has led to "a search to improve the service of the commission. A variety of solutions have been offered," including revision of the commission's rules of practice and a study by an outside engineering firm.

"Each commissioner," Mr. Arpaia continued, "has been so involved in the day-to-day pressure of disposing of current cases that organizational and administrative planning have necessarily been neglected. Regardless of the excuse, that planning must be done. There should be someone directly charged with the responsibility of finding ways of expediting procedures and of promoting efficiency. There should be a focal point within the commission to which plans and suggestions for improvement can be referred and where they can be followed through. Someone must be charged with the task of coordinating and correlating the functions of the commission. I do not believe that this can be a part-time assignment of one commissioner or of a division of the commission . . .

"More immediately important, is the fact that the position of executive director has now been created. The right man, at the right salary, with the proper delegation of both responsibility and authority can and will help correct this situation."

D.P.A. Allots Materials For 1953's First Quarter

The Defense Production Administration has announced its allotments of controlled materials for the first quarter of 1953. The "railroad equipment" allotments made to the National Production Authority include 1,071,453 tons of steel, 86,300,000 pounds of copper, and 5,135,000 pounds of aluminum.

These allotments are handled by N.P.A.'s Railroad Equipment Division. As to copper and aluminum they are the same as the allotments made for this year's fourth quarter. The steel allotment is down 350,000 tons, a total of 1,421,709 tons having been allocated for the fourth quarter.

Ohio Valley Board Hits Car Cleaning Losses

"There is no excuse for any shipper not *completely* unloading each car—particularly when he sweeps his own platforms clear before the 'empty' is pulled from his siding. Every railroad should see that shippers are properly informed of their neglect, and of the moral responsibility they owe themselves if they expect good transportation," said the Ohio Valley Transportation Advisory Board's special Clean Car Committee in a report issued at the Louisville, Ky., meeting of the board on September 16-17.

The committee's report said it was unfortunate that many shippers encourage placement of empty cars, regardless of their condition, on the plea that the equipment is needed and that

all cleaning will be carried out at their own expense. "As long as this theory prevails, we will never improve the clean car program."

The committee also pointed out that, while it has been stated many times that cleaning cars costs the railroads upwards of $100 million annually, this figure does not take into consideration car days lost switching to and from cleaning tracks, loss of per diem, or loss on investment while equipment is out of service. "Since this economic loss is equal to, if not greater than, the national loss and damage claim account, why can't it be given as much collective and individual thought?," the committee asks. It further suggests that the problem needs policing by an agency independent of railroad traffic solicitation, and that further study be conducted by the National Association of Shippers Advisory Boards.

At the joint luncheon session, J. T. Metcalf, general attorney of the Louisville & Nashville, spoke on the recent proposal of the American Bar Association to place percentage limits on federal income taxes.

Escalator Clauses Call For Another Two-Cent Raise

Railroad employees working under agreements with so-called escalator clauses will receive another increase of two cents per hour, effective with the beginning of this year's fourth quarter on October 1. This will follow a like increase which became effective with the beginning of the current quarter on July 1.

The escalator clauses call for quarterly adjustments of one cent per hour for each point of change in the Consumers' Price Index (old series) calculated by the Bureau of Labor Statistics. The August 15 index of 192.3 requires the October 1 raise. It was two points above the May 15 index (190.4) which governed during the current quarter.

The escalator-clause base is 178, so the October 1 adjustment will bring the raises it has provided up to 14 cents per hour.

Steam Locomotive Institute Endowment Goes To Stevens

Dissolution of the Steam Locomotive Research Institute, Inc., and the setting aside of its funds to establish scholarships for sons of railroad men "who made the 'iron horse' an exciting symbol of the country's growth" were announced at a luncheon in New York on September 19, when R. P. Johnson, president of the research group, presented a $40,000 check for the scholarship endowment to Jess H. Davis, president of Stevens Institute of Technology.

Annual income from this fund will "assist one or more deserving sons of railroad men or sons of deceased railroad men" to obtain an engineering education, according to stipulations by the research institute. Students will be selected by Stevens and scholarships will be awarded according to individual need and ability. The endowment, Mr. Johnson explained, has been set up as a memorial to the traditions and accomplishments of the steam locomotive by the institute, which has conducted development work for American locomotive builders.

In accepting the gift, Mr. Davis pointed out that among the contributions to the establishment of railroads in this country by the Stevens family, for whom the Stevens Institute is named, were the first steam locomotive, the first charter for a railroad, the wooden railroad tie, the T-rail and the "hook-headed" spike.

John W. Roberts, Transport Analyst, Dies

John W. Roberts, transportation analyst for the Illinois Commerce Commission at Chicago, died, following a brief illness, on September 16.

Mr. Roberts entered railroad service in 1899 with the Santa Fe at Wellington, Kan. After working in numerous clerical capacities in engineering and accounting offices, he resigned in 1914 to enter the service of the Interstate Commerce Commission at Kansas City. Shortly after being appointed district accountant in 1918, he was loaned to the U.S. Railroad Administration and transferred to Washington, D.C., where he established and took charge of the accounting department. He resigned from the U.S.R.A. in 1920 to become president and general manager of the Roberts - Pettijohn - Wood Corporation, Chicago, a firm which handled accounting, appraisal and engineering matters for members of the railway car building industry. From 1932, until he joined the Illinois commission in 1950, Mr. Roberts carried on a private practice as consultant in traffic and transportation matters.

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended September 20 were announced by the Association of American Railroads on September 25 as follows:

	Surplus	Shortage
Plain Box	211	4,162
Auto Box	25	86
Total Box	236	4,248
Gondola	33	3,211
Hopper	7	6,868
Covered Hopper	0	402
Stock	140	15
Flat	4	213
Refrigerator	3,956	0
Other	720	11
Total	5,096	14,968

One Hundred Injured In Canadian Wreck

Two Canadian Pacific trains, Nos. 9 and 10—Montreal-Sudbury sections of the "Dominion"—collided head-on early on the morning of September 14, four miles west of Mattawa, Ont. One engineman and a fireman were seriously injured, and over 100 passengers suffered minor cuts and bruises. No. 10,

"PLEASE UNLOAD CLEAN" requests the Great Northern in a "Clean Car Month" message stenciled inside all new and "heavy repair" box cars. The idea was conceived for observance of "Clean Car Month" in September, but will be continued permanently. Here G. L. Snyder, superintendent of GN shops at St. Cloud, Minn., inspects the message in a newly built car.

eastbound to Ottawa and Montreal, overshot a siding and stopped, but before it could back into the siding it was struck by No. 9, westbound. The collision occurred during a dense fog, on a curve on a high embankment above a lake. The line was cleared for traffic a few hours later on the day of the wreck, and a probe of its cause is in progress.

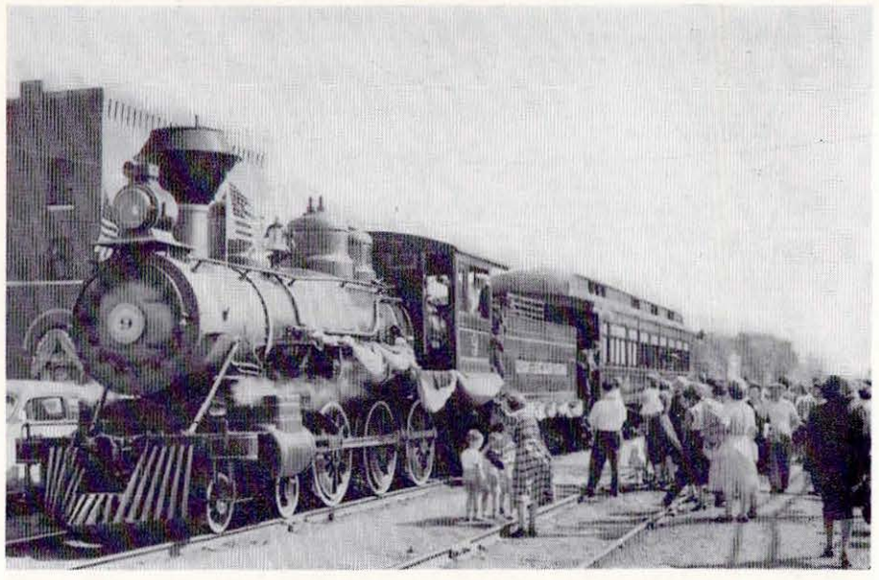
Shipside Facilities Should Handle Trucks—Knudson

Port facilities adapted to handle "not only rail traffic but also that moving to or from shipside by truck" are "in step with the times," according to Defense Transport Administrator James K. Knudson.

Mr. Knudson made this statement in a September 18 address at the dedication of the North Carolina State Port Terminal at Wilmington. He noted that the terminal's facilities will accommodate trucks at shipside; and he called the facilities "modern" in that and other respects. He also revealed that D.T.A. is examining the truck-facility aspect of port operations "with a pilot study now under way at Philadelphia."

"The day has passed," Mr. Knudson added, "when export freight movement was simply a rail and water proposition. And we must adjust ourselves to that in the use of our ports, just as we are adjusting ourselves to the transportation revolution in so many sectors of the national economy."

The D.T.A. administrator also said that the "smaller ports" should be kept "alive and ready for use in an emergency." In that connection he went on to refer to studies being made of the possibility of diverting traffic from the big ports to "alternate ports." He added, however, that "the selection of specific alternate ports and the method of providing for extensive improvements are problems calling for careful thought rather than impulsive action."



ROCK ISLAND CENTENNIAL celebrations have been led off by this old-time locomotive and dining car which toured Chicago South Side suburban territory amid costumed festivities on September 5. Close behind was the "Southtown Rocket," a diesel powered train made up of streamlined suburban equipment. Special box lunches were distributed from the "Rocket," which also served as a meeting hall for several local business groups. This was the first of a series of local celebrations to mark the 100th anniversary of the first Rock Island train, which ran on October 10, 1852.

SP TO OPEN A CENTRALIZED "TELEPHONE TICKET OFFICE"

In its Central Travel Service Agency, soon to be opened in the Pacific Electric building at Los Angeles, the Southern Pacific will introduce an entirely new method of handling city ticket sales.

A patron, whether seeking information or desiring to purchase transportation, will be directed to one of a series of comfortable "sit down" telephone booths, rather than to the traditional ticket window. The phone will be automatically connected with a telephone ticket salesman at a central telephone sales board located in another part of the building. When the salesman has obtained all necessary information, he will direct the customer to the travel office's lounge to await preparation of the tickets. The salesman will then send the passenger's requirements to a central ticket makeup unit. When the tickets are completed, they will be sent by pneumatic tube to the main floor. The patron will be paged over a public address system and directed to one of five delivery windows to complete the transaction.

The system lends itself to "will call" service with little change in routine. Passengers may also contact the telephone sales board directly from their home, office or hotel.

The new agency will consolidate functions of the SP's city ticket office and its reservation service agency.

I.C.C. Won't Reconsider Minimum Berth Charges

The Interstate Commerce Commission has refused to reopen the case involving increased minimum charges for Pullman sleeping-car accommodations which became effective August 1.

The reconsideration was sought by the Secretary of the Air Force. The commission issued a September 15 order in the case (I. & S. Docket No. 5982) to deny the secretary's petition (*Railway Age*, August 4, page 14).

Additional "News of the Railroad World" appears on pages 58, 63 and 64.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Central of Georgia** has doubled its recent order for 25 70-ton covered hopper cars placed with the Pullman-Standard Car Manufacturing Company (*Railway Age*, September 1, page 24). Estimated cost of the 50 cars is $362,769.

The **Northern Pacific's** board of directors has approved purchase, or construction in company shops, of 200 70-ton ore cars and 500 40½-ft. refrigerator cars, at an estimated cost of $7,000,000.

The **St. Louis-San Francisco** will build one 125-ton capacity flat car.

LOCOMOTIVES

The **Central of Georgia** has ordered 24 diesel units at an estimated cost of $3,112,000. Twelve 1,600-hp. road-switchers will be built by the American Locomotive-General Electric Companies. The Baldwin-Lima-Hamilton Corporation, the Electro-Motive Division of General Motors Corporation and Fairbanks, Morse & Co. will each build four 1,200-hp. switchers with multiple-unit controls. Deliveries are scheduled to begin late in November and be completed by February 1953. When all units are received, the road will be completely dieselized.

The **Delaware, Lackawanna & Western** has ordered six 1,600-hp. road-switchers from Fairbanks, Morse & Co.

PASSENGER CARS

The **Atchison, Topeka & Santa Fe** has ordered 113 all-stainless-steel passenger-train cars from the Budd Company. Included are 45 48-passenger chair cars, eight full-length dome-lounge cars each seating 76 passengers in the upper section, 50 baggage cars and 10 railway post office cars. The chair cars and five of the dome-lounge cars will be used to re-equip the Los Angeles-Chicago "El Capitan." Delivery of the new cars is expected to begin in the fall of 1953.

IRON & STEEL

The **Louisville & Nashville** has ordered 69,750 net tons of 132-lb. rail costing an estimated $5,600,000, and track fastenings costing about $3,700,000. Purchase of the equipment—sufficient to lay 300 miles of track—is part of the L&N's program of relaying all its main-line track with 132-lb. rail. The rail and fastenings will be manufactured at the Ensley, Ala., plant of the Tennessee Coal, Iron & Railroad Co.

The **Texas & Pacific's** 1953 rail-laying program calls for a total of 47 track miles of 132-lb. rail between Russell, Tex., and T&P Junction on the Eastern division main line. A carry-over of 18 track-miles still due on 1952 contracts will bring to a total of 65 the track mileage to be relayed next year.

SUPPLY TRADE

William J. Fritton, formerly assistant to president, has been elected vice-president and sales manager of the **Van der Horst Corporation,** with headquarters at Olean, N. Y.

The **New York Air Brake Company** has announced the following executive changes: **Charles T. Zaoral** has been elected a director and, effective November 1, will become vice-president in charge of operations. **Lewis K. Sillcox** has been elected vice-chairman of the board. **Robert G. Hess** has been named manager of the firm's main division at Watertown, N. Y. and **R. H. Mitchell** has been appointed acting president of the Kinney Manufacturing Company, a subsidiary, to succeed Mr. Hess. **Frederic W. Hewes** has been elected vice-president in charge of finance for the parent company and will continue as treasurer.

Donald M. Jenkins (left), formerly assistant chief engineer of General Motors Diesel, Ltd., has been appointed chief engineer, to succeed Daniel J. Smilanich (right), who has rejoined the Electro-Motive Division at La Grange, Ill. Mr. Smilanich will establish a group to develop designs for locomotive conversions, and repair information for wrecked locomotives.

The **Baker-Raulang Company** has announced addition of **Walter S. Maranuk** to its Detroit staff. Mr. Maranuk will serve as a vice-president of **H. A. Stevenson, Inc.,** Detroit, distributors of Baker industrial trucks in Michigan.

The **Westinghouse Air Brake Company** has purchased a majority interest in the **Le Roi Company,** Milwaukee, manufacturer of engines, portable compressors and rock drills. On August 20 an offer was made to Le Roi stockholders to purchase common stock at $9 per share and preferred stock at $53.75 per share, provided 400,000 shares of the 576,000 outstanding shares of common stock were deposited by September 15. Over 400,000 shares were so deposited and checks are being mailed to holders of these shares. The offer to buy common stock at $9 per share is beng held open and continued to October 15.

C. R. Boll, Jr., who has been appointed general sales manager, Cummins Engine Company, Columbus, Ind. Mr. Boll will be responsible for engine, parts and contract sales; the company regional organization; advertising, and sales development. Mr. Boll formerly was manager—engine sales.

Franklin Fickett, formerly sales representative of locomotive replacement parts for the **Hunt-Spiller Manufacturing Company** of Boston, has been appointed manager of the railroad sales division of **Bowser, Inc.** Mr. Fickett gained his early railroad

Franklin Fickett

experience as an apprentice machinist in the mechanical department of the New York, New Haven & Hartford. From September 1942 until August 1946 he served with a United States railroad battalion, spending two years in Iran on maintenance of diesel locomotives. Upon separation from service as a first lieutenant, he joined the railroad division of Fairbanks, Morse & Co. as a service engineer of diesel locomotives.

The **Pressed Steel Car Company** has announced virtual completion of arrangements to acquire within the next two months the **Axelson Manufacturing Company** of Los Angeles, maker of petroleum-pumping and air-

W. A. Stringer, who has been appointed sales representative, Southeastern region, of the Electro-Motive Division of General Motors Corporation, at Jacksonville, Fla. Mr. Stringer joined Electro-Motive in 1945 and was sales engineer at the time of his recent appointment.

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craft equipment, and the **Umpqua Plywood Corporation** of Eugene, Ore., a plywood and lumber company. Stockholders of Axelson will vote on the proposed acquisition, to be accomplished through issuance of 537,630 Pressed Steel Car common shares for Axelson's assets, on October 8. Acquisition of Umpqua will probably necessitate some form of borrowing by Pressed Steel Car. The purchase will involve over $2.000.000 in cash. It is probable that Axelson and Umpqua will be operated as separate divisions, with no changes in present management or personnel.

William P. Davis, who has been appointed to the newly created position of branch manager of the Robertson, Mo., factory branch of the Electro-Motive Division of General Motors Corporation. The growth of both parts and rebuild activities at that point led to creation of the new position. Mr. Davis has been succeeded, in his former capacity of branch plant superintendent, by John C. Sikes.

Emmett F. Cary, formerly district sales manager of the coupling department of **Koppers Company,** has been appointed district sales manager for the metal products division. With headquarters in Pittsburgh, his territory will include western Pennsylvania, West Virginia and part of Ohio.

D. R. Edge, manager, government sales, at Washington, D. C., for the **Graybar Electric Company,** has been given the additional title of manager, communication sales.

Harold A. Jones has been appointed to the newly created position of manager, Technical Information Center, of the communications and electronics division of **Motorola.**

Arnold J. Larson has been named general traffic manager of the **Masonite Corporation,** Chicago. Mr. Larson has been associated with the corporation's traffic department since

Arnold J. Larson

1936, and since his return in 1946 from four years service with the Army Air Forces, has been assistant traffic manager. He had served in the traffic department of the Chicago Tribune for nine years prior to joining Masonite.

Herbert J. Watt has been appointed assistant vice-president—sales, Western area, and **F. Royal Gammon,** assistant vice-president—sales, Eastern area, of the **United States Steel Company.**

Mr. Watt, whose headquarters will be in Chicago, was originally employed by the Carnegie Steel Company in 1912. In 1925 he joined the sales department of the Jones & Laughlin Steel Corp. as assistant general manager of sales at New York. He returned to the Carnegie-Illinois Steel Corporation in 1939 and in 1941 was transferred to Chicago as manager of sales for the western area. He held this position at the time of his current appointment.

Mr. Gammon joined the sales department of Carnegie-Illinois in 1936 as special representative in the New York district sales office. In 1938 he was appointed manager of district sales at Cleveland and in 1942 returned to New York as manager of district sales at that point. He was further promoted to manager of sales for the Eastern area in 1950, and held that position at the time of his current appointment. He will remain in New York in his new capacity.

William F. Kiser, Jr., and **Robert T. Jennings** have been appointed sales application engineers for the **Reliance Electric & Engineering Co.,** in the Philadelphia and Detroit district sales offices, respectively. **John M. Duff** has been assigned to the applied engineering and industrial sales department, at Cleveland.

The **General Electric Company** has begun construction of a $1,600,000 service shop at Erie avenue and I street, Philadelphia. The new one-floor structure will encompass 130,000 sq. ft. of floor space, and is scheduled to go into operation in May 1953. It will be G. E.'s largest and best equipped service facility, capable of handling transportation, utility and industrial apparatus. The area it will service includes southern New Jersey, eastern Pennsylvania and Delaware.

CAR SERVICE

I.C.C. Service Order No. 869, which restricts the use of refrigerator cars for commodities other than perishables, has been modified by Amendment No. 6, which set back the expiration date from September 30 until March 31, 1953.

FINANCIAL

Boston & Maine.—*New Director.*—Laurence F. Whittemore, president of the Brown Company, has been elected a member of this road's board of directors. Mr. Whittemore, former president of the New Haven, began his career in 1913 in the B&M shops at Concord, N. H. In 1932 he was made assistant to the president of the B&M and the Maine Central, resigning in 1946 to become president of the Federal Reserve Bank of Boston.

Seaboard Air Line.—*To Call Preferred Issue.*—Directors have taken action to call for redemption on October 20 all outstanding 5 per cent series A preferred shares. The redemption price is $105.28 a share. After redemption the only class of capital stock the SAL will have outstanding will be common stock.

(Continued on page 55)

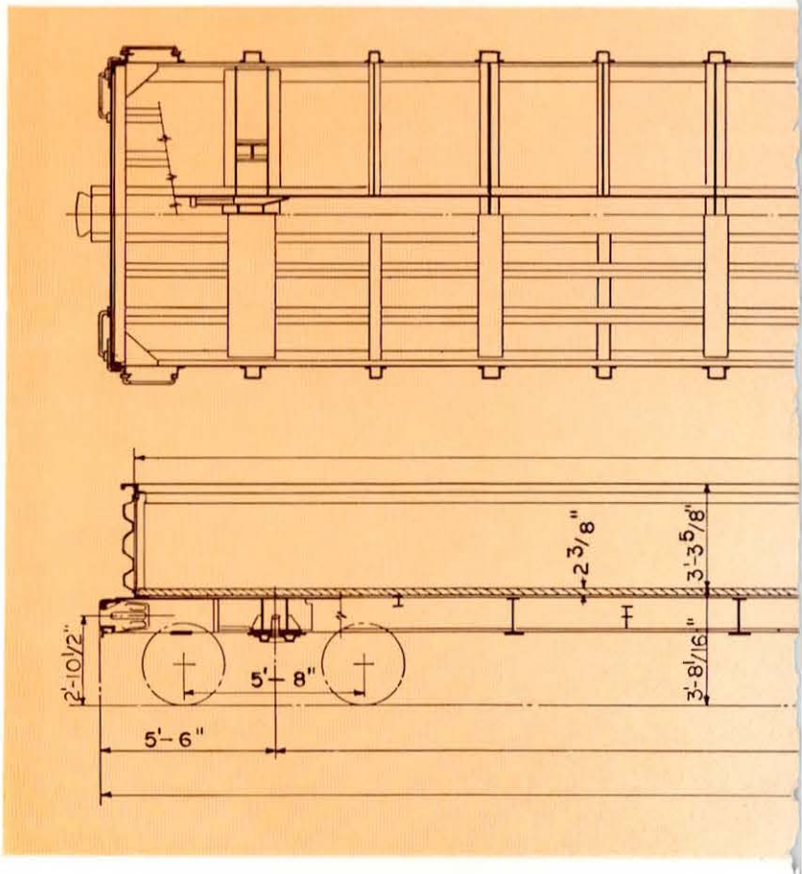
How many giraffes could you ship tomorrow?

Maybe you'll never be asked to ship a giraffe, but there *are* "special" jobs that come up constantly on any Railroad. Many times the answer to these odd-shaped cargo problems is

A.C.F. GONDOLA CARS

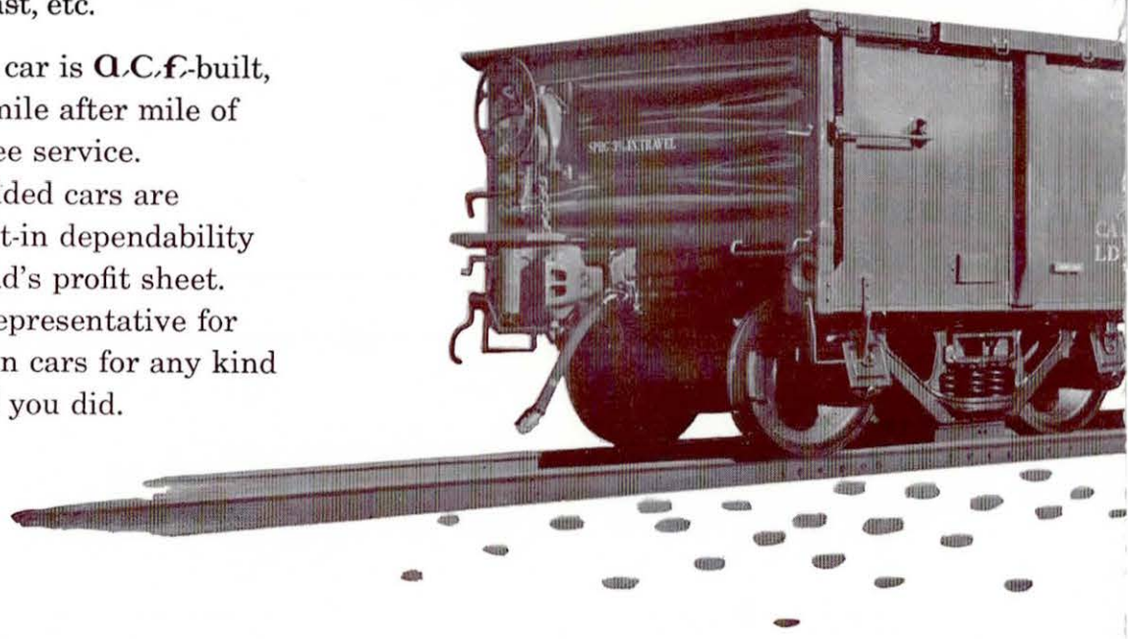
Look over the following pages and see how low-maintenance A.C.F. Gondola cars can add revenue to your line!

Smart railroadmen use for 'extra profits' from



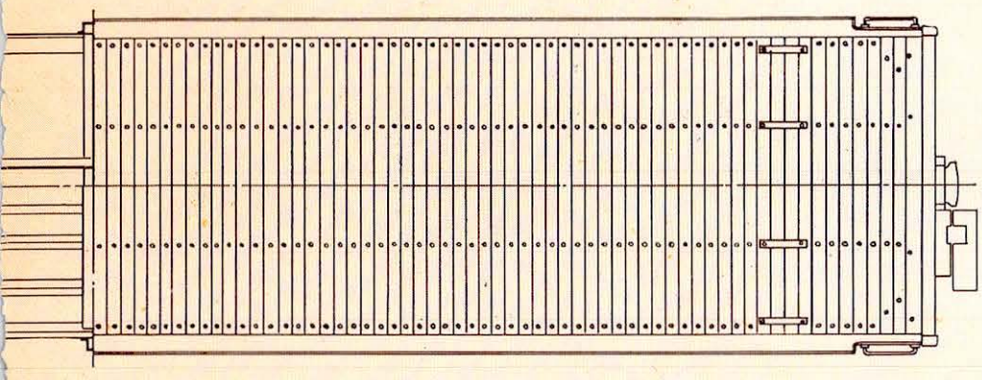
One of the most useful and profitable cars to a Railroad is many times "not available" when the lading is waiting. From scrap metal to lumber, logs to iron pigs, the gondola car is ideal for picking up these extra profits! Moreover, you can keep gondola cars constantly busy transporting track repair materials, cast iron wheels, axles, and ballast, etc.

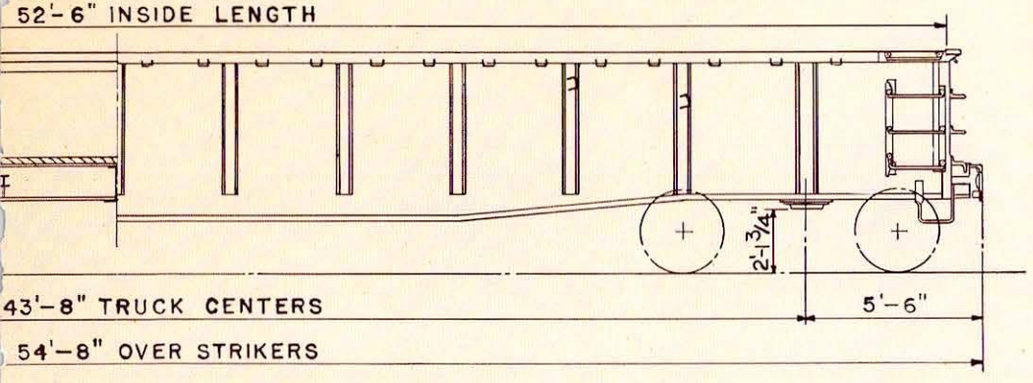
And when that gondola car is ACF-built, you rest assured of mile after mile of steady, trouble-free service. Rugged ACF all-welded cars are famous for this built-in dependability so important to a Railroad's profit sheet. Call in your ACF Representative for the complete facts on cars for any kind of shipping. You'll be glad you did.

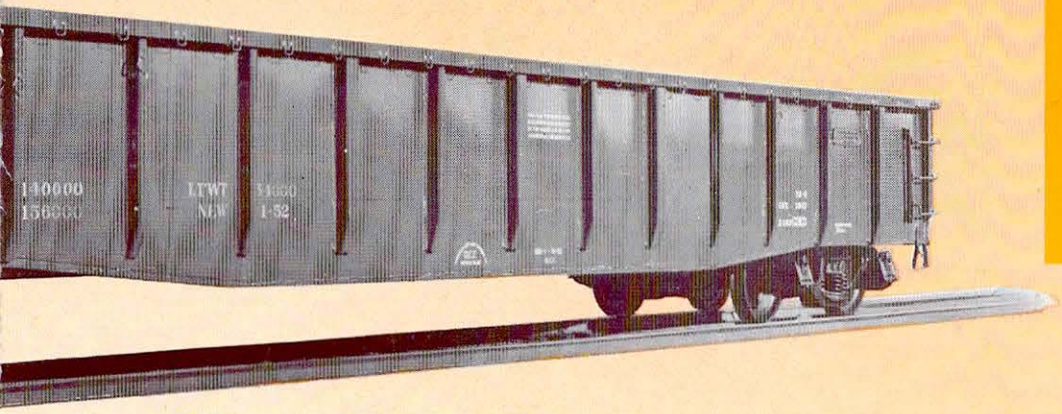


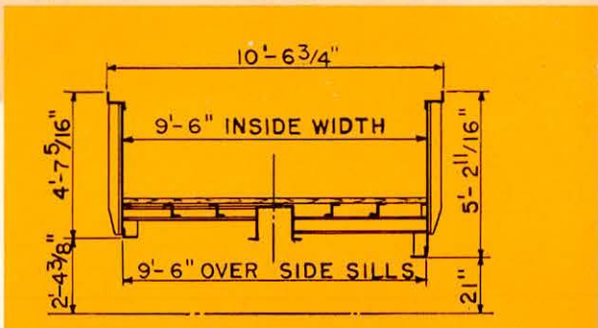
a.c.f. GONDOLA CARS

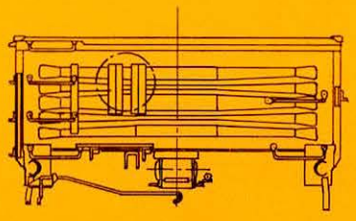
special jobs!

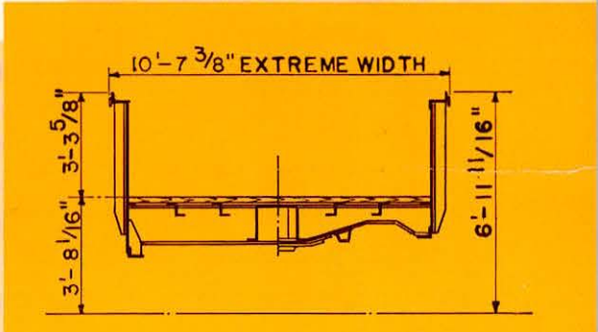




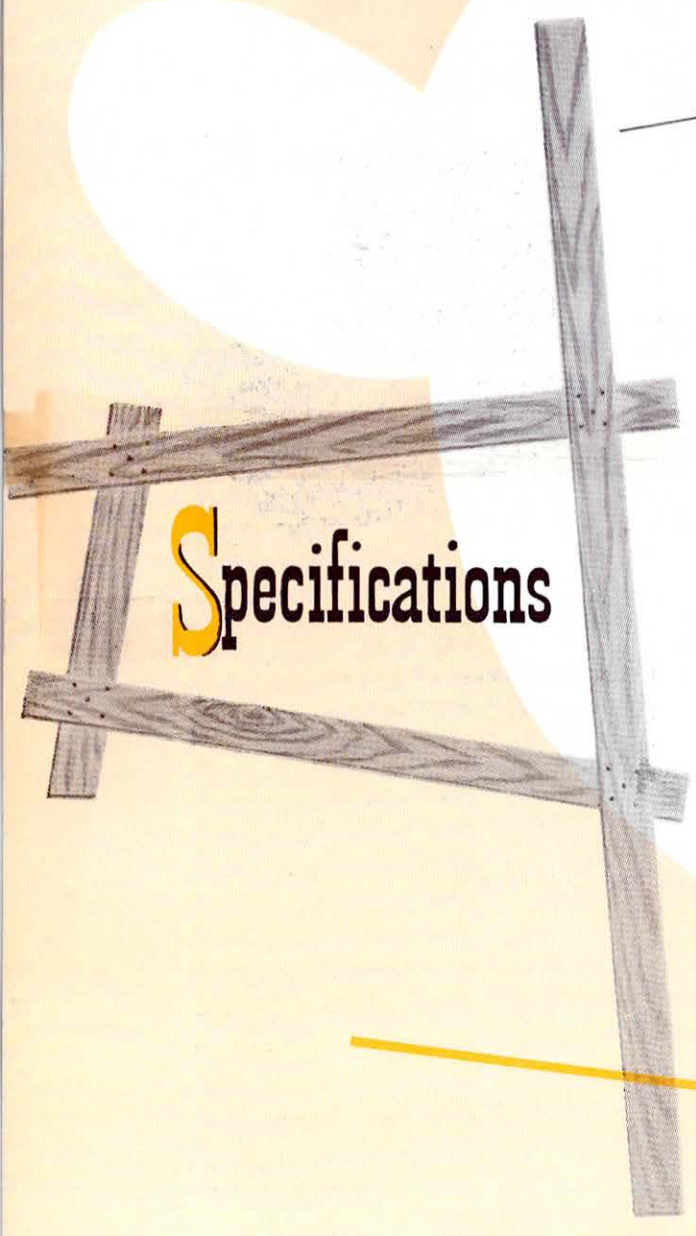








a.c.f. CAR BUILDERS TO AMERICA'S RAILROADS



Specifications

Length inside	52'6"
Length over strikers	54'8"
Width over side top chord	10'-6¾"
Width inside	9'-6"
Height rail to top of floor	3'-8 1/16"
Height rail to center of coupler	2'-10½"
Height inside	3'-3⅝"
Track gauge	4'-8½"
Truck wheel base	5'8"
Cubic capacity	1660 cu.ft.
Estimated light weight of body	36,100 lbs.
Estimated light weight of car	54,300 lbs.

a.c.f. **AMERICAN CAR AND FOUNDRY COMPANY**

New York • Chicago • St. Louis • Cleveland • Philadelphia
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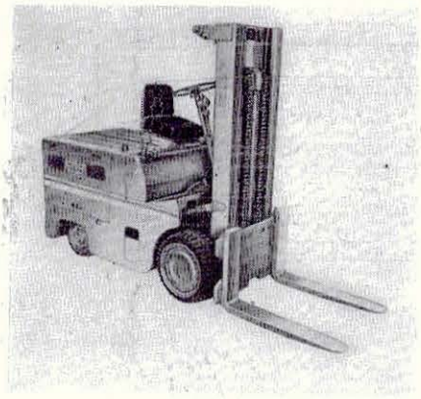
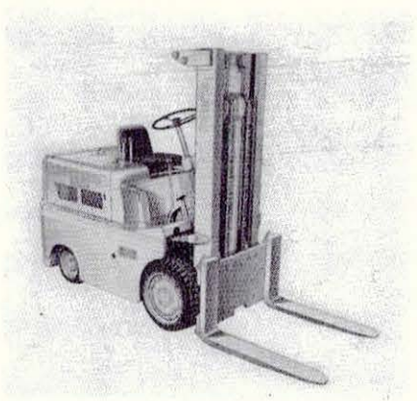
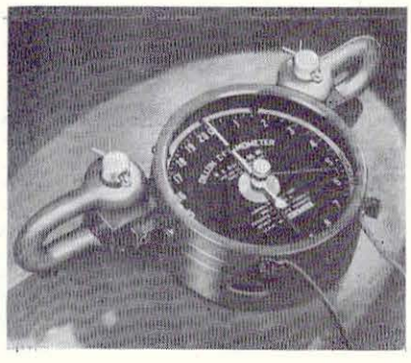




New Clark Fork-Lift Trucks

The Clark Equipment Company, Battle Creek, Mich., have announced two new fork-lift truck models—one electric and one gas-powered— in the 6,000-7,000-lb. range. Among the features of these new "Utilitrucs" is a new fork mounting approved and recommended by the Industrial Truck Association. The new mounting is a step toward interchangeability of attachments and devices between different makes of trucks of comparable capacity. "Free-lift" is 25 inches, and more lift is provided by a new upright design which does not increase upright height and affords better vision.

The electric model (left) has an improved deadman parking brake which functions automatically when the driver leaves the seat. The brake on the gas model (right) is actuated by a hand lever. Both models offer maximum accessibility to engine compartment or motors and controller. Controls and instruments have been regrouped within easy reach. Clark's "quick change" clutch is standard on the gas truck and "Dynatork" magnetic induction drive is optional. The speed of the electric truck has been boosted to 6 m.p.h. The battery compartment will hold a wide range of batteries.



Indicating Dynamometer

An indicating, electrical, traction dynamometer, known as Model EL, is now being made by W. C. Dillon & Co., Forest Park, Ill. It can be made to operate electrical warning signals, relays, motors, switches, etc.

It is made in 13 different capacities, ranging from 0-500 lb. to 0-100,000 lb. A 5-in. or 10-in. diameter dial is optional. A red hand records the maximum load attained. The dial is protected with shatterproof safety glass. The dynamometer is overload protected and is furnished with shackles and attachment pins. It is rust and moisture proof. The 0-500-lb. model weighs 8½ lb.

The blue hand on the dial is adjustable to any load desired. This holds one of the contacts. As load is imposed, the white pointer moves forward until it reaches the desired point, thereby closing contact with the blue hand.

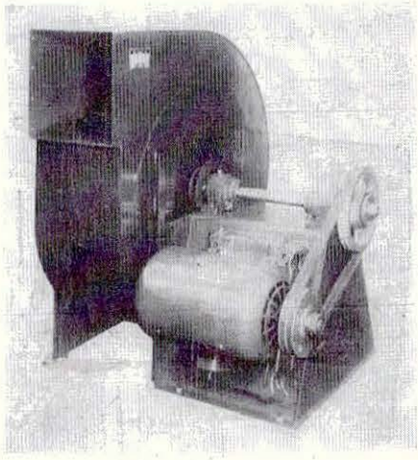
Lead wires shown in the illustration may be connected directly to a power source and thence to the object to be controlled. A few typical uses for the instrument are in automatic batching machines, warning signals to prevent overloading of cranes or hoists, remote indication of loads, etc.

The dynamometer does not depend upon springs but works upon the principle of deflecting a calibrated beam.

Plexiglas Reflectors

An injection molded Plexiglas material with 2,900 optical lenses per sq. in. has been introduced for all types of signs requiring night legibility. Named Reflexite by its manufacturer, the Reflexite Corporation, New York 5, the material is considered suitable for railroads as it is said to be resistant to weather deterioration, corrosion due to sulphuric acid and fractures from flying stones.

The product can be used for the speed control boards, stop signs, multiple track, mile post and whistle post signs, and reflectorization of non-electrified cabooses.



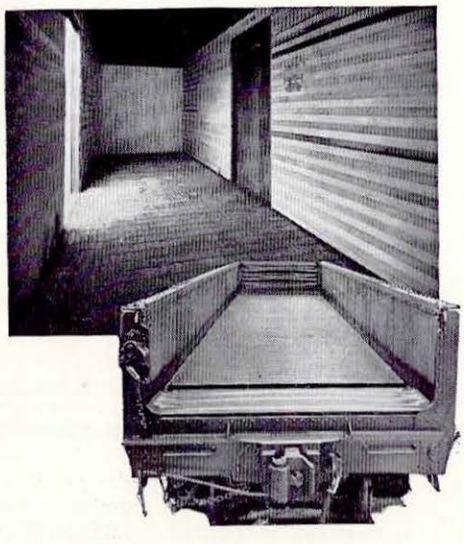
Fan for Handling Air or Materials

A motor-driven fan built with either an air handling, a materials handling, or a long shavings wheel is now available from the Westinghouse Electric Corporation, East Pittsburgh, Pa. The fan is made in 11 sizes, with capacities ranging from 670 to 44,000 cu. ft. per min., and pressures up to 16 in. water gage. The air handling wheel has backwardly-inclined blades featuring low power consumption over a wide range of volumes and pressures. It is particularly suitable for exhausting smoke, fumes and light dusts. The heavy-duty, straight-bladed, side-plated, materials-handling wheel combines high fan efficiency with its material handling features. Conveying of sawdust, granular materials and chips are typical applications of this type of wheel. The long shavings wheel has no side plates and has been specifically designed for handling long, stringy fibers.

Standard accessories for the fan include both bolted and quick opening type access doors, flanged outlets and inlets, and outlet dampers. It is available with a variety of special coatings, and can also be built of special metals to meet explosion-proof or anti-corrosive specifications. For high-temperature applications, special cooling accessories are available.

As the modern Diesel outperforms OLD 999

Nailable Steel Flooring outperforms other freight car floors



*AAR Bulletin—May 19, 1952

"Class I railroads in the first four months of 1952 installed in service 883 new locomotives. 878 of these were Diesels."*

This is recognition of the Diesel engine's superior performance over other kinds of tractive power.

Naturally, there are good reasons for the railroads' switch to Diesels.

Likewise, more and more, America's leading railroads are recognizing the superiority of NAILABLE STEEL FLOORING for freight cars because:

- N-S-F and its exclusive nailing to steel feature mean greater security for lading of all kinds—and the nails used in blocking cannot damage the floor.
- N-S-F assures constant serviceability for boxcars and makes one type of gondola do the work of two.

These characteristics of N-S-F, made of N-A-X HIGH-TENSILE steel, mean greater structural strength for freight cars . . . greater efficiency in overall railroad operations.

N-S-F for NAILABLE STEEL FLOORING SAFER-STRONGER

PATENTS PENDING 52-SF-9

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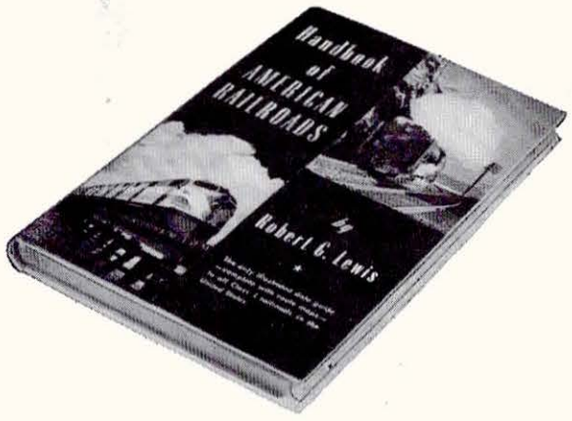
STEEL FLOOR DIVISION • Ecorse, Detroit 29, Michigan

NATIONAL STEEL CORPORATION

Sales representatives in Chicago, Philadelphia, St. Louis, Atlanta, Omaha, Denver, San Francisco, Montreal and New York



Official Facts, Figures, Photos and Maps of Every Class I Railroad in the U. S.

HANDBOOK
of
AMERICAN RAILROADS

by ROBERT G. LEWIS

Transportation Editor, *Railway Age*

How many diesels has the Chicago, Burlington & Quincy? . . . When was the Gulf, Mobile & Ohio started? . . . Who is president of the St. Louis-San Francisco? *Handbook of American Railroads* supplies you with these and tens of thousands of other answers.

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Now you can get—for the first time under one cover—official up-to-date facts on 127 Class I railroads. Specially-drawn maps show the route of each road. Beautiful action photos of crack trains such as Twin Cities Zephyr, The Red River, The Inter-City Limited, and dozens more fill the book.

This means convenience for the railroad executive, fun for the railfan, and—for everyone concerned with railroads—a tremendous gain in railroad knowledge that only a vast accumulation of facts like this makes possible.

265 p. 5½ x 8½ 375 ill. board **$2.95**

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Benchmarks and Yardsticks

A PERSONNEL OFFICER of a large railroad very appropriately suggests that a few more words be said in this space about *willingness to listen* as an indispensable attribute in a man who aspires to successful leadership.

Nobody knows everything and listening is necessary in order not to miss useful information and suggestions. There is hardly anybody not insane who doesn't know at least *something* worth hearing—which, if made known to an officer or supervisor, would be helpful to him in his work. The man in charge of other men who doesn't attract from them the useful information they could give him is hardly likely to do as good a job as he would do if he had this information.

But there is another reason for listening by a man in supervisory position—quite apart from the useful information he will get. This reason is the cooperative attitude a subordinate invariably develops toward a superior who pays some attention to his information, his opinions and his troubles.

A group of people in the employ of a railroad are, by themselves, as unable to accomplish anything as a roomful of batteries with no wires connecting them. The batteries of an organization get wired when the boss establishes ready two-way communication with his subordinates. When these wires are hooked up right, power is available that wasn't effective before. Of course, tight and loose connections are possible in such a hook-up. There may be short circuits. And some hook-ups are more efficient than others.

Anyhow, the top man has the primary responsibility for doing the hooking up, and the power available to him from his organization won't get there if he insulates himself from it.

The other day a railroad officer who has a new chief reported somewhat as follows: "The new man seems to want to know what we can tell him, if it's important. He even seems willing to change his mind if what we tell him points that way."

From which it appears reasonable to conclude that the new chief knows how to establish two-way communication, and can expect to induce a proportionate increase in the effective power and output of his organization. Incidentally, it isn't just within departments that ease of two-way communication helps, but between departments as well.

It's true that suggestions which come to a department from "outside" often miss the mark because they fail to take all conditions into account. On the other hand, failure to see the forest for the trees is a danger no specialist can avoid (and, today, we're all specialists).

J. G. L.

when the heat is on...

specify Okonite-Okoprene Diesel wiring

When Diesel locomotives burn up the mileage, there's always danger of burning up the wiring, too. High temperatures generated by a Diesel are rough on conventional types of wiring — that's why so many builders now specify Okonite-Okoprene Diesel Locomotive Wiring.

Okonite-Okoprene meets the flame test requirements of the Underwriters' Laboratories. To pass these tests a cable must not support combustion or communicate flame along the cables. In contrast to ordinary saturated fibrous coverings, Okonite's time-proved Okoprene sheath provides a barrier against continuous high temperature.

This tough Okoprene sheath withstands the other saboteurs of Diesel wiring, too. It is moisture resistant and mechanically tough, safeguarding the insulation against abrasion and other types of possible damage. Okoprene is particularly resistant to petroleum products in general use on Diesels, thus preventing swelling and softening of the insulation.

Okonite-Okoprene Diesel wiring is insulated with Okonite insulation — the same long-lived mineral-base rubber insulation that has been used so successfully for important electrical circuits by three generations of railroad men.

Bulletin RA-2078A gives full details of Okonite-Okoprene Type DEL Diesel Locomotive Wiring, for both conduit and exposed installations. Ask your Okonite representative, or write for your copy of this bulletin to: The Okonite Company, Passaic, N. J.

The best cable is your best policy

OKONITE OKONITE SINCE 1878 ***insulated wires and cables***

1214

NEEDED — SOME REALISM IN FACING THE LABOR SITUATION

Some railroad people the other day were getting rather stern criticism because they had "given in" on the issue of the "union shop." A railroad executive in the group admitted the unsoundness of the concession, but he cited the strength of the forces arrayed against further opposition—(a) the desertion of the "conservative" legislators (including Senator Taft) in changing the Railway Labor Act to legalize the "union shop"; (b) an emergency board decision adverse to the railroad position on this issue; and (c) the unlikelihood that the railroads could win a strike on this question, with both the executive and legislative departments of the government on the "other side."

This explanation is pretty cogent—but it would be more so if the railroads which capitulated were to make it plain to employees and the public why they acted as they did, registering their complaints against the political factors which, in their opinion, made their action unavoidable. There is always deep sympathy for a lady who is forcibly bereft of her virtue, provided incontrovertible evidence appears of her strenuous opposition to what occurred.

It is a natural human trait to quit clamoring about almost any abuse after repeated experience has demonstrated that the clamor accomplishes no tangible results. That fact probably explains the comparative silence in which railroad managements have suffered repeated indignities at the hands of governmental power operating in the partisan behalf of the union organizations.

Union, Government Policies Unrealistic

Meantime, it is evident to any observer that union policy—and government policy in dealing with organized labor—is quite unrealistic. The nation's present course, if followed much longer, will not only prove the undoing of private business and national solvency, but will destroy the unions themselves or turn them into mere tools of the government. Somebody besides a few courageous and unpopular prophets such as Donald Richberg and Leo Wolman ought to be telling the people the truth about this situation, even if there is small likelihood of early remedial action.

This paper is not inclined to be overly critical of the leaders of the railway labor organizations in this situation. It is not unlikely, if they were to attempt being less importunate than they have been, that they would be replaced by leaders a lot harder to deal with than they are. In other words, the union leaders will become more cooperative when the political climate they live in encourages that course of action on their part. Changing the political climate will probably be a slow job; and so it is up to those who know the answers to initiate the process of education.

Three Incompatible Objectives

There are three conditions that politicians have kidded a lot of people—and especially working people—into believing that the country can enjoy at one time. These conditions are (1) complete freedom of bargaining by strong and unregulated unions; (2) full employment; and (3) stable prices. But everybody who pays attention to events can see that not all three of these things are compatible. The unions, aided by full employment, push wages up faster than production increases—resulting inevitably in price increases. No matter how much alleged "price control" there is, prices must inevitably go up when wage costs mount. Otherwise a lot of businesses couldn't continue production—and decreased production would result in unemployment.

The Economist (London) has recently called attention to the attempt in Britain to maintain these three politically popular objectives at the same time; and to the fact that this effort isn't any more successful on that side of the Atlantic than on our side. The Economist believes there could be stability of prices and freedom for the unions in bargaining, if full employment were sacrificed—putting a premium on jobs and thus exerting some restraining pressure on the upward tendency

of labor costs. The publication warns against expecting "voluntary restraints" by the unions to exercise effective control because, even if most unionists should desire to pull the reins on themselves, interunion competition would make it impossible for them to do so.

Complete government control of the whole productive process—prices, wages, profits—could, of course, maintain full employment and keep prices down, but not many people in their right minds would welcome that alternative. Since we are doing nothing at all toward limiting union monopoly power, or in permitting some degree of unemployment, something has had to give way, and it is the price structure that is doing the yielding.

Continuance of this processs will ruin everybody, including those who benefit temporarily from it.

Anybody can understand why increasing wages *faster* than "productivity" increases must inevitably inflate prices. It is equally true, but not so easy to understand, that "across the board" wage increases are inflationary even if some rise in "productivity" is occurring. In the July-August issue of the Harvard Business Review there appears a chart, portraying the change in man-hours per unit of output from 1939 to 1947 of 43 different industries. In 17 of these industries—or 40 per cent of the total—output per man-hour *declined*. For example—take coal mining. In soft-coal mining the man-hours per ton were reduced 11 per cent, but in hard-coal mining the man-hours per ton *increased* 10 per cent. If, on the strength of the "productivity" theory, the soft-coal industry could stand wage increases, the same logic would call for wage reductions in anthracite mining.

As everybody knows, the "productivity" argument isn't worked that way. It is used to boost wages in the industries where there has been an increase in man-hour output; and then an equivalent wage boost is demanded and received, on the "wage parity" argument, in those industries where man-hour output is stationary or on the decline, resulting inevitably in price increases in such industries. Moreover, so-called "increases in productivity" are not usually the result of harder or more skillful work by employees, anyhow. Instead they usually come from the introduction of more efficient machinery. The savings from some of the reduced man-hours must be set aside to pay for the machinery—the savings can't all be paid out in increased wages without increasing prices.

The fact is that practically no attention at all is being paid to fundamental and easily understandable economic and political principles in present-day dealings with organized labor. Those who are aware of these things and neglect to explain them to those who do not can scarcely claim to be doing their duty in attempting, at least, to pass along the heritage of freedom which our ancestors bequeathed to us. By the way, has everybody seen the instructive factual leaflet on labor policy which is issued by the General Electric Company under the title of "The General Electric Commentator"?

WHAT ABC MEANS

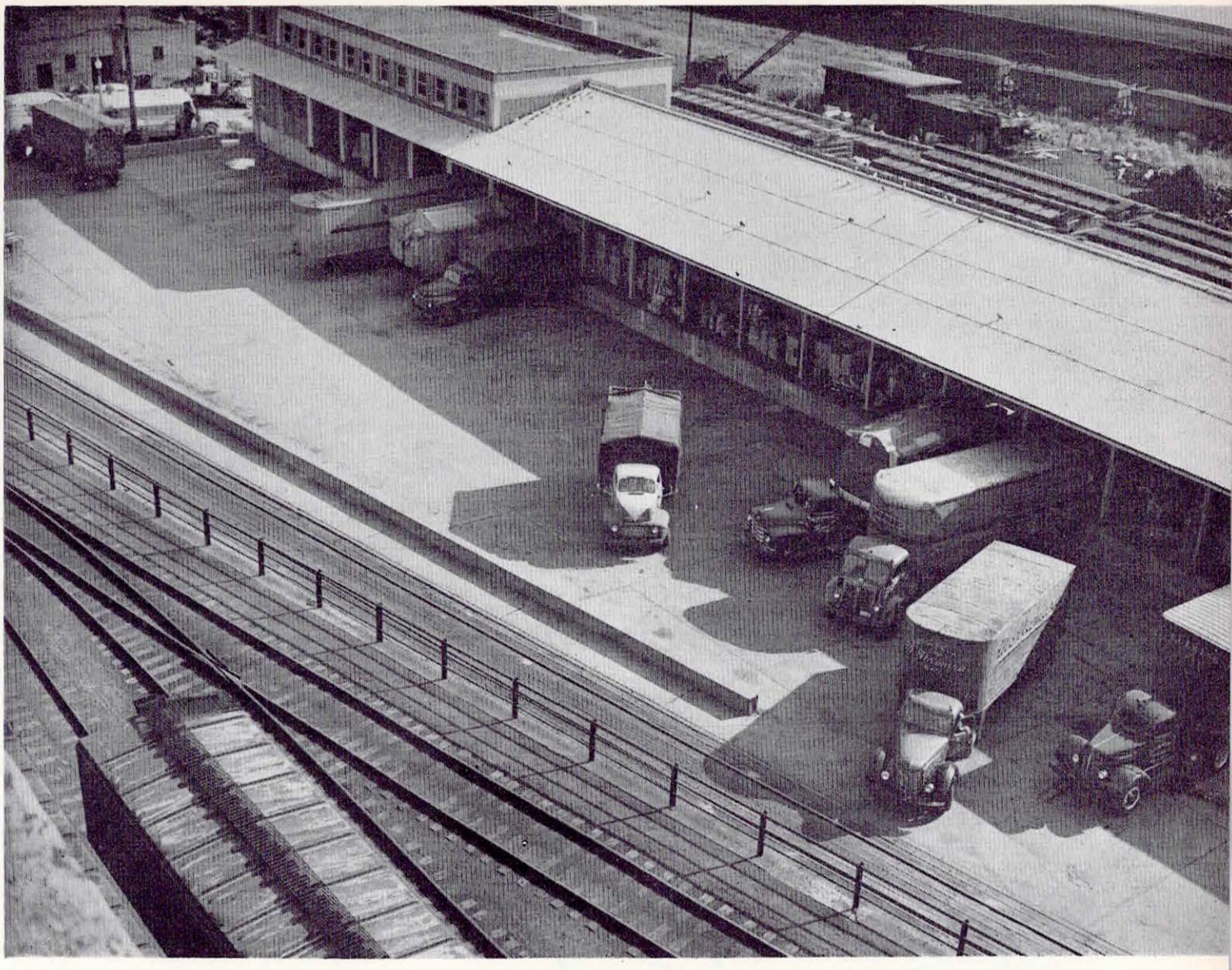
Maybe you've noticed the ABC and ABP monograms which appear regularly on our contents page. The ABC stands for Audit Bureau of Circulations and the ABP for Associated Business Publications. Both monograms signify adherence to high standards of integrity on the part of a publication which qualifies to display them.

Prior to 1914 there were no generally accepted standards for measuring a publication's circulation. A publisher could claim any figure that happened to occur to him and might seem attractive, and it was hard to prove otherwise. Manufacturers interested in advertising their products had no sure way of knowing what kind of people and how many of them were readers of any given paper. A group of publishers and advertising men, perceiving their mutual need for dependable facts and figures on circulation, formed a cooperative association known as the Audit Bureau of Circulations, of which *Railway Age* is a charter member.

Since that day, experienced auditors of the bureau have made annual audits of the circulation records of all member publications—and their reports on who and how many people pay their good money to receive each paper regularly are available to all interested persons. Today 370 business publications are members of ABC and, of this number, 124 are also members of ABP, in which membership is open only to those publications which are already members of ABC. There are hardly any of the big newspapers and magazines of general circulation that are not ABC members. In the industry press the ABC audit has a peculiar value, because it reveals not just how many subscribers a publication has, but what their business or occupation is.

There are many publications and other means of communication in industry which are not eligible for membership in ABC or ABP but which often serve a useful and legitimate purpose—for instance, car cards, direct-mail literature, free publications, and so forth. Nobody would for a moment contend that the only good horse is the one for which the owner can produce a full pedigree. But at the same time the owner of the pedigreed animal can feel some satisfaction in his ability to prove beyond cavil the worth of his property.

An institution which builds up and polices product quality as ABC has done deserves well in reputation and public support from the community. In the publishing business, we're glad publishers and advertisers thought up this device, and did the job so well that government was not tempted to take on the assignment.



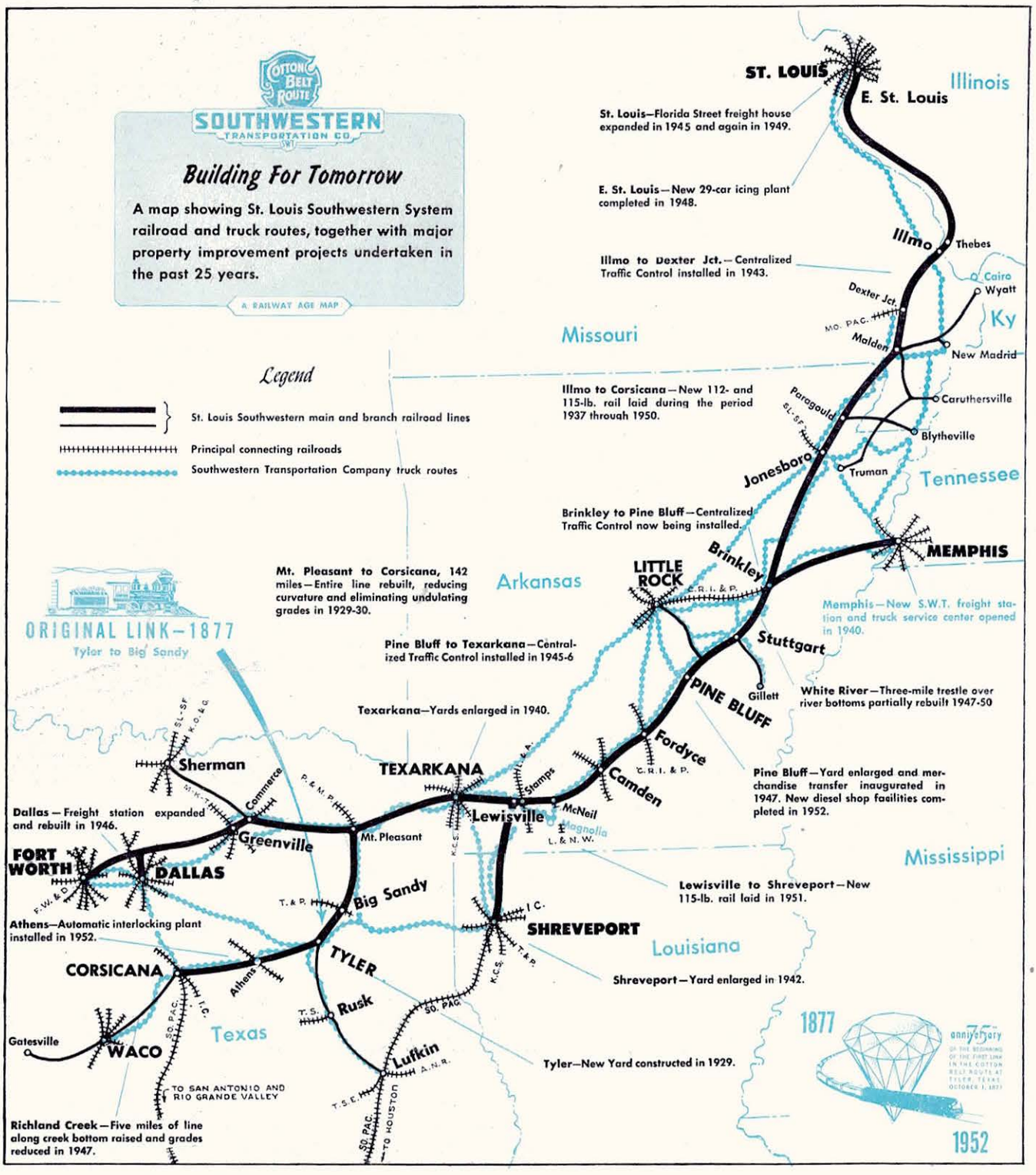
Merchandise traffic to and from St. Louis has grown so rapidly that the Cotton Belt has had to expand its Florida Street freighthouse twice in the past eight years.

Cotton Belt Observes 75th Anniversary

Celebration marked by employee service awards, birthday cakes, rose festival, and a continuing dedication to the principle of constantly providing better service

On October 1, the St. Louis Southwestern will observe its seventy-fifth anniversary, a milestone in the history and progress of a railroad specializing in fast, dependable freight service. As a part of the celebration, all employees will be invited to participate in "birthday parties" to be held simultaneously at key points on the railroad at noon on that date. Those who have completed 20 or more years of service will be awarded newly established service pins. Festivities will be climaxed by a large party in Tyler, Tex.—the "birthplace" of the Cotton Belt—at 6 p.m. that evening.

The Cotton Belt has long been known among railroad men and shippers for its fast freight service. Recognizing that this reputation has its roots in loyal and efficient employees, the railroad is pointedly sharing its honor and pride with them. That this mutual association has proved beneficial both to the employees individually and to the company is evidenced by the fact that nearly one



out of every three Cotton Belt employees in service today has accumulated at least 20 years of continuous service.

The city of Tyler, which has been closely associated with the railroad from its very beginning, is extending an unusual honor to the railroad by combining a Cotton Belt diamond anniversary celebration with its annual rose festival. Participation in this rose festival is usually confined to interested community organizations from all parts of the country, and is intended to highlight the importance of the rose bush growing industry in East Texas. The Cotton Belt is the first commercial organization to be invited to participate in this festival—which coincides with the road's birthday celebrations.

The Cotton Belt had its beginning on October 1, 1877, when the Tyler Tap, a 21-mile narrow-gage railroad, was opened for business between Tyler and Big Sandy, Tex. It was built to link the fruit and agricultural center of Tyler with larger markets by way of the railroad then

running through Big Sandy. From its inception, the Tyler Tap was strictly a community enterprise, built by local capital, and officered and manned by local people. Every person along the line had a direct interest in its welfare. Looking back through history, it is evident that this community interest is what kept the enterprise alive, and gave it the strength and determination to keep going as it ran into increasingly severe problems.

The Tyler Tap soon fell victim to financial difficulties. In response to overtures by local Texans, James W. Paramore, owner and operator of the St. Louis Cotton Compress Company, became interested in the railroad, and heavily invested in it as a means of shipping Texas cotton to St. Louis. He later devoted his entire attention to extending the railroad—by then known as the Texas & St. Louis—through the cotton fields of East Texas and Arkansas into St. Louis. Access to St. Louis was originally planned through an interchange agreement with the St. Louis & Iron Mountain. When Jay Gould took control of the SL&IM, he broke that agreement, denying the Cotton Belt access to St. Louis, in an effort to gain control of the company.

It was this move which forced the small company to convert to standard gage and to extend its own line east and north through Arkansas toward St. Louis.

Present Size Reached in 1904

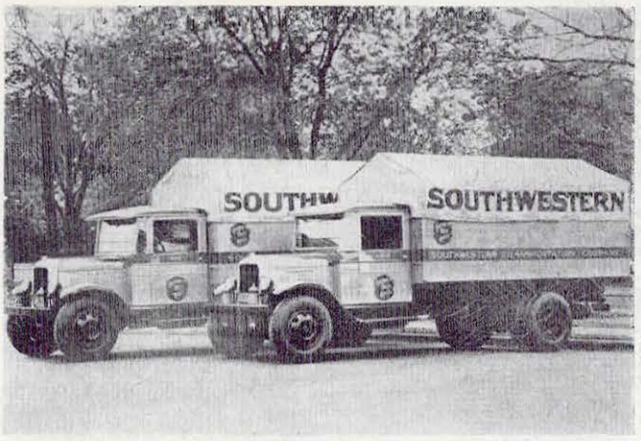
The railroad reached substantially its present size in 1904 when it began operating direct into East St. Louis, eliminating the circuitous route via ferry to Cairo, Ill., thence to East St. Louis. By this time the railroad's line through the cotton fields of east Texas and Arkansas had acquired the nickname, "Cotton Belt Route."

From that time on, the railroad has devoted its attention to building what it already owned into a better railroad. In 1932, through a plan approved by the Interstate Commerce Commission, control of the company was acquired by the Southern Pacific, which desired a direct outlet to roads east of the Mississippi river. In addition to providing needed services for the territory it serves, the line now acts as an important connecting link between the eastern gateways of St. Louis and Memphis, and the territory in Arkansas, Louisiana, Texas, Arizona, New Mexico and California reached by the lines of the Southern Pacific and other connecting railroads.

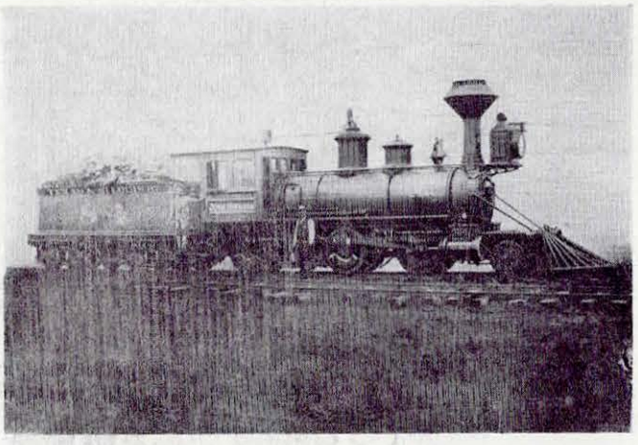
A Pioneering Road

In the course of its growth and development, the St. Louis Southwestern pioneered in a number of fields associated with railroad management and operation. The strength of the railroad as it stands today is attributed to the vision and imagination of its management.

The industrial use of sanitation and preventive medicine was new in 1917 when the Cotton Belt undertook to help the communities along its line help themselves, for it was convinced that its future as a railroad lay in developing its territory. But much of the territory was plagued by malaria (carried by the Anopheles mosquito) and, in southeast Texas, by black water fever. It was evident that large-scale farming or industry could not be established, nor could people in the territory work to benefit themselves, until the debilitations of these diseases were overcome. At the suggestion of U. S. Army engineers, who had successfully cleared the Canal Zone of malaria, the railroad hired a promising young sanitation engineer who promptly set to work to rid Cotton Belt territory of the insect-borne disease.



The Cotton Belt was one of the first railroads to establish subsidiary truck operations to improve merchandise service. These pioneer trucks were photographed in 1931—the year the Blue Streak Merchandise service was inaugurated.

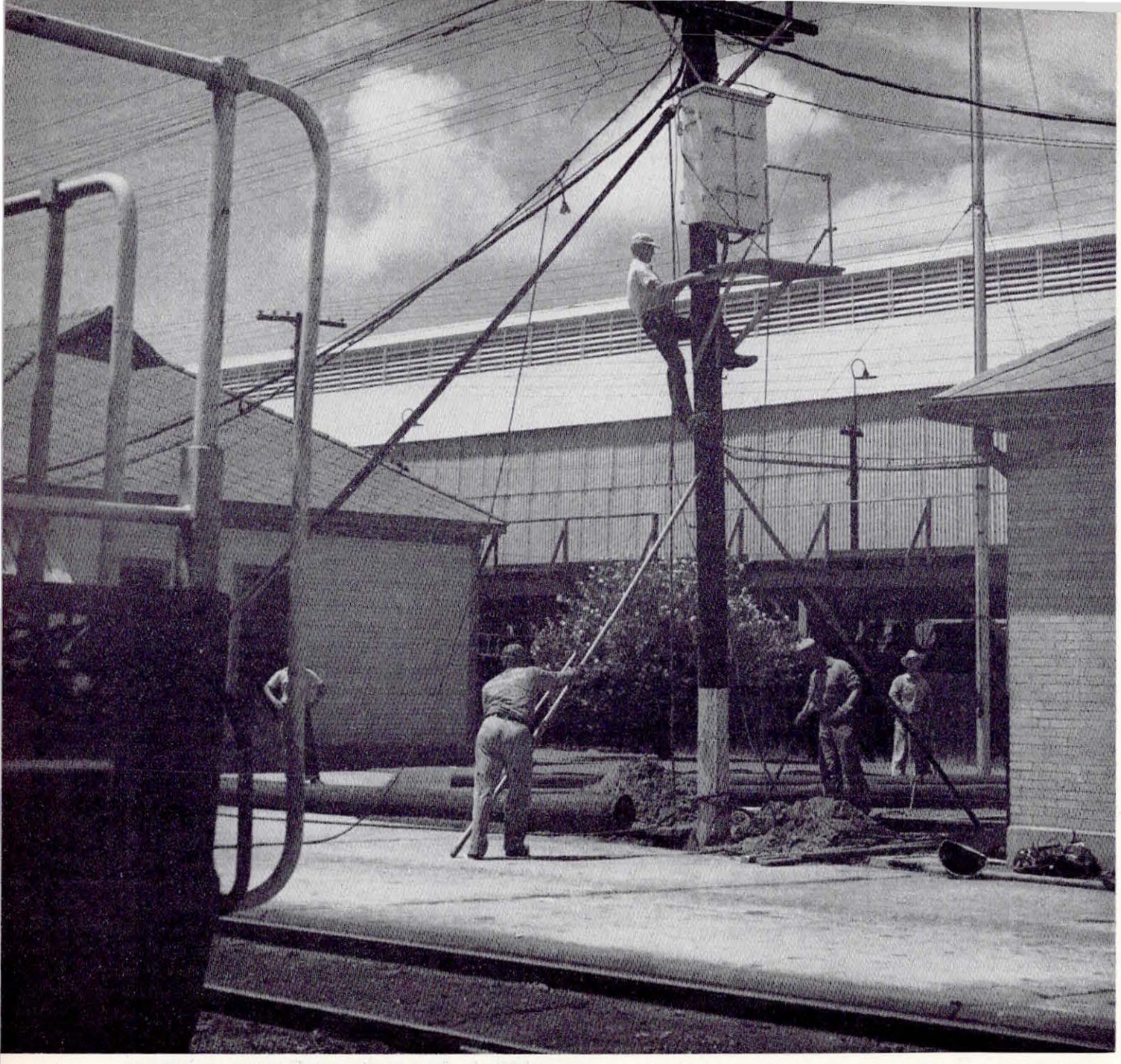


One of the 2-6-0 narrow-gage locomotives used on the Texas & St. Louis—a predecessor of the Cotton Belt. This locomotive was built by the Rhode Island Locomotive Works in 1884.

In order to start the work, the Cotton Belt agreed, when necessary, to share in the cost of extensive drainage, sanitation, oil spraying and quinine distribution programs in all infested towns along its lines. In other cases, the railroad took over the cost of field work when municipal appropriations were exhausted. Local response was excellent and within four years the towns were carrying the entire burden. The railroad policed its own property, and distributed prophylactic quinine to its own employees, at its own expense. Skeptical natives, who traditionally resent the betterment programs of outsiders, were soon won over when the program began to produce results. Within three years the small lumber mills—just about the only industries in the territory—reported they were able to increase their lumber output during the malaria season by 20 to 30 per cent.

The Cotton Belt maintained permanent malaria control programs for many years, until proper drainage and sanitation became so well established that a formal organization was no longer necessary. The sanitation engineer who developed and carried through this program—and whose services have been loaned to many governments and other industries—is still with the company as its engineer of tests and sanitation.

The company's management during the past quarter of a century is generally credited with preparing the



Centralized traffic control is being extended between Brinkley and Pine Bluff, Ark., adding 67 more miles to the 200 miles already equipped. Here line wires are being strung into the dispatcher's office at Pine Bluff.

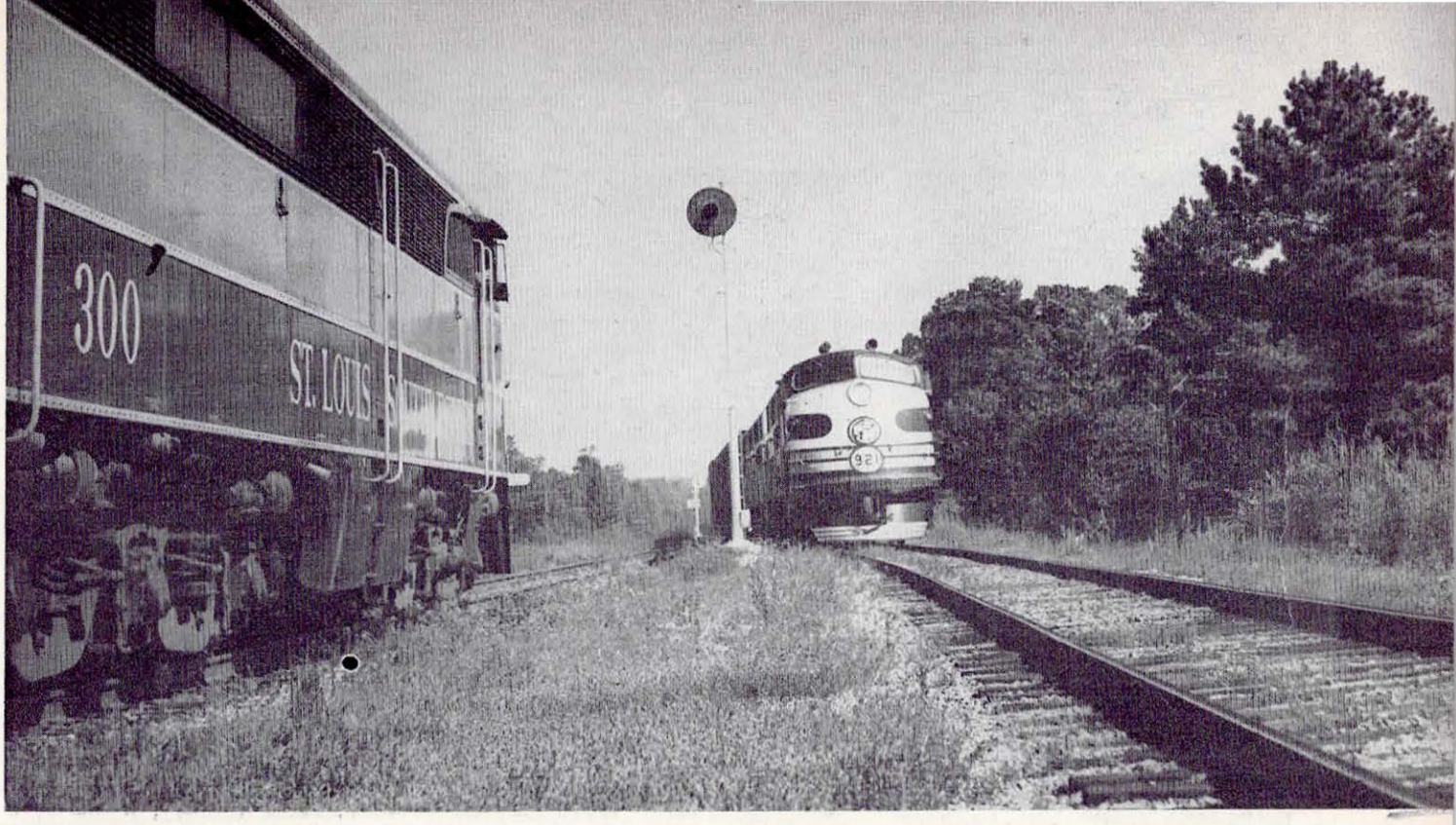
road for the role it fills today. Foreseeing the potential value of trucks as an ally of the railroads in the handling of l.c.l. and merchandise freight, its officers instigated the formation of the Southwestern Transportation Company, a wholly owned truck subsidiary, on October 1, 1928. In addition to its important function in the handling of freight, SWT originally operated extensive bus services in lieu of local passenger trains; this interest was disposed of to the Southwestern Greyhound lines in 1933.

"Blue Streak" Service

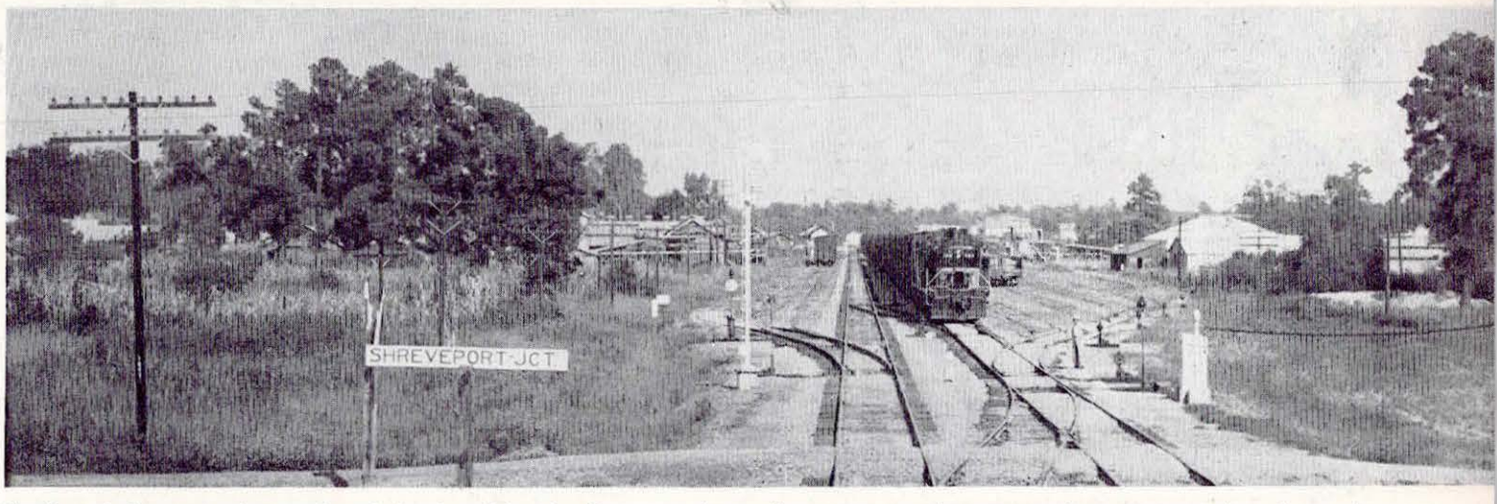
Substantially all of the truck route mileage shown on the accompanying map was placed in operation prior to 1935. Thus it is one of the oldest railroad-owned truck lines in the country, and is today an important link in the road's "Blue Streak" merchandise service.

It was the same kind of foresight and desire to develop new techniques to meet new situations that led to the establishment of the road's "Blue Streak" fast merchandise train on October 1, 1931. With this train the Cotton Belt pioneered in the movement of l.c.l. freight at passenger train speeds "in a striking effort to recover merchandise traffic lost to competitive motor trucks." It was originally pulled by passenger engines, and was carried in the operating time cards as a first class train. It became known as "the fastest freight train in America."

The success of this venture is demonstrated by the train itself, which averaged 15 cars during its first year of operation, and is still operating—on a faster schedule—but with an average of over 65 cars. On many days it is operated in two or more sections. And the service offered by the "Blue Streak" has been expanded through the addition of other equally fast trains handling carload traffic. (*Railway Age*, June 2, page 77.)



The Cotton Belt expects to achieve complete dieselization by the end of this year. Here is a C.T.C.-arranged meet of a northbound perishable freight and a southbound passenger train near Texarkana.



Service of the type pioneered and developed by the Cotton Belt depends on an adequate, well-maintained plant.

A steady program of property improvement has been carried on, as here in the yard at Lewisville, Ark.

Also typical of Cotton Belt pioneering were its experiments with highway buses fitted to operate on rails, which were ultimately discarded as mechanically impractical.

For Better Service

Service of the type pioneered and developed by the Cotton Belt is not possible without an adequate, well-maintained physical plant. The road's pioneering in the field of new types of services has been matched by a steady, if unspectacular, program of property improvement.

Some of the larger improvements instituted in the past 25 years to permit better service at lower costs are shown on the accompanying map.

The company is now in the final stages of a complete transition from steam to all-diesel operation. Upon receipt of eight road-switchers in December 1952, all operations will be conducted with diesel-electric power, with a small number of steam engines maintained for stand-by service only.

It is planned eventually to equip the entire line from Illmo to Corsicana for operation by centralized traffic control. A program has been mapped for extending c.t.c. —now in service between Illmo and Dexter Junction, Mo., and between Pine Bluff, Ark., and Texarkana—to the line between Brinkley, Ark., and Pine Bluff (now being installed), and between Texarkana and Tyler (now planned for next year).

The Cotton Belt doesn't live in the past. But during its 75th anniversary year it has glanced over its shoulder for a moment to see why and whence it came. The 75 years of progressive transportation instills confidence for the future to those of the present who guide its fortunes.

Clark Hungerford (left), president of the St. Louis-San Francisco, which won the gold medal for Class A roads, and Robert S. Henry, vice-president of the A.A.R. and a member of the Harriman Award committee.

N. R. Crump (left), vice-president of the Canadian Pacific, the United States lines of which were awarded the gold medal for Class B roads, and Cyril Ainsworth, president of the American Museum of Safety.

Ward Wire (left), vice-president, and A. F. Franz (center), president, of the Colorado & Wyoming, received the Class C gold medal. W. J. Patterson, member of the I.C.C. and of the award committee, is at the right.

Railroads Get Harriman Awards For Best 1951 Safety Records

Notwithstanding substantial increases in the volume of freight and passenger services performed during the year, the number of fatalities resulting from railroad accidents in 1951 was less than in the preceding year," James G. Lyne, editor of *Railway Age*, said on September 17 in an address at the 33rd annual Harriman Award dinner at the Hotel Ambassador, New York. Mr. Lyne, who is chairman of the Harriman Award committee of the American Museum of Safety, presented the awards to the winning railroads.

Emphasizing that safety work on railroads is not a new thing, Mr. Lyne outlined the progress made by railroads in their safety efforts during recent years by comparing the 1951 record with railroad safety statistics of 1941 and 1926. "Having in mind," he said, "that railroads performed 36 per cent more freight service in 1951 than in 1941, and 18 per cent more passenger service, it is worthy of note that the number of fatalities in railroad accidents decreased 33 per cent and the number of non-fatal injuries decreased nine per cent. Making the comparison with 1926, freight service performed in 1951 was nearly half again as much, while passenger service was virtually the same, yet fatalities declined by more than 50 per cent and non-fatal injuries were reduced by nearly 75 per cent."

Mr. Lyne added that further progress in reducing accidents has been made in 1952. In the first six months of the current year, he said, there were 11 per cent fewer fatalities and 14 per cent fewer non-fatal injuries among persons in railroad accidents than in the first half of 1951. Seventeen billion passenger-miles of service were performed by railroads in the first six months of 1952 without a passenger fatality in a train collision or derailment.

The Harriman awards, founded in 1913 by the late Mrs. Mary W. Harriman in honor of her husband, E. H. Harriman, are awarded annually by the museum to stimulate a direct effort for conserving human life. The awards consist of three gold medals—presented to railroads which lead their respective classes in safety records—and 11 certificates of commendation. The certificates are awarded to nine railroads and two switching and terminal companies. Class A railroads are those operating 10,000,000 or more locomotive-miles annually; Class B roads operate less than 10,000,000 but more than 1,000,000 locomotive-miles yearly; and Class C roads operate under 1,000,000 locomotive-miles each year. Switching and terminal companies are divided into two groups: ST-1 (those reporting 2,500,000 or more man-hours of work a year), and ST-2 (those reporting less than 2,500,000 man-hours annually).

This year's gold medal for Class A railroads went to the St. Louis-San Francisco. Clark Hungerford, Frisco president, accepted the medal from Mr. Lyne. Canadian Pacific lines in the United States received the gold medal for Class B roads and the award was accepted by N. R. Crump, vice-president. Ward Wire, vice-president of the Colorado & Wyoming, accepted the gold medal awarded that road for the best safety record among Class C roads.

P. A. Trageser (right), first vice-president, Cambria & Indiana, and James G. Lyne, editor of *Railway Age* and chairman of the award committee.

J. M. Fitzgerald (left), vice-chairman, Eastern Railroad Presidents Conference, and Harry Babcock, general manager, Pennsylvania-Reading Seashore Lines.

J. A. Fisher (right), president, and J. J. McCool (center), superintendent of safety, of the Reading, with Mr. Fitzgerald.

W. C. Beaman (right), vice-president and traffic manager of the Texas Mexican, and Mr. Fitzgerald.

John Budd (right), president of the Great Northern, and Mr. Lyne.

Wilson McCarthy (left), president of the Denver & Rio Grande Western, and Mr. Ainsworth.

Certificates of commendation were awarded as follows: In the Eastern district—Reading (Class A), accepted by J. A. Fisher, president; Pennsylvania-Reading Seashore Lines (Class B), accepted by Harry Babcock, general manager; Cambria & Indiana (Class C), accepted by Paul A. Trageser, first vice-president; Southern district—Norfolk & Western (Class A), accepted by R. H. Smith, president; Nashville, Chattanooga & St. Louis (Class B), accepted by W. J. McWhorter, general manager; Tennessee Central (Class C), accepted by J. Lewis Armstrong, senior vice-president; Western district—Great Northern (Class A), accepted by John M. Budd, president; Denver & Rio Grande Western (Class B), accepted by Wilson McCarthy, president; and Texas Mexican (Class C), accepted by W. C. Beaman, vice-president and traffic manager.

The Cleveland Union Terminal received the award for Group ST-1, and it was accepted by A. G. Teets, division superintendent at Cleveland for the New York Central. R. N. Wilson, general manager of the River Terminal (Group ST-2), accepted the certificate awarded to that company.

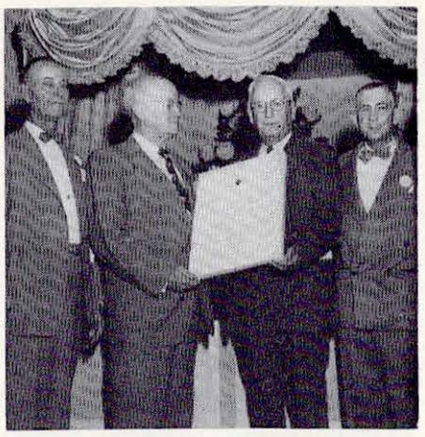
The Arthur Williams Memorial Medal, a personal safety award, this year was presented to H. William Heinrich, assistant superintendent, engineering and inspection division, Travelers Insurance Company. Cyril Ainsworth, president of the museum, who presided at the dinner, made the presentation to Mr. Heinrich.

Mr. Hungerford, in accepting the gold medal awarded the Frisco, said: "The beginning of our company's intensified drive to advance the cause of accident prevention dates back to 1947—soon after the Frisco emerged from trusteeship. At that time the casualty ratio per million man-hours worked stood at 12.31. Five years later, or by the end of 1951, it had been reduced to 4.91, less than half of what it had been. . . . Several factors influenced that reduction. Throughout that five-year period the physical composition of the plant was undergoing considerable change as the tools of technology made possible a degree of modernization unequalled in any comparable period in the company's history. . . . A safety department was created, and adequately staffed, under direction of a superintendent of safety, Roy P. Hamilton.

"The years and months which followed," Mr. Hungerford continued, "saw an educational campaign which utilized such media as motion pictures and radio, posters and pamphlets and a full coverage of safety activities in the company-sponsored employee newspaper. To stimulate competition among company forces, safety performance was put on a contest basis and a set of awards was rotated among the various departments which posted

George M. Kevlin (left), and J. Lewis Armstrong (second from right), general counsel and senior vice-president, respectively, of the Tennessee Central, with Col. Henry (second from left), and Mr. Patterson.

R. H. Smith (right), president of the Norfolk & Western, and Col. Henry.



W. J. McWhorter (second from right), R. H. Short (right), and W. H. Street (left), general manager, superintendent of safety and engineman of the Nashville, Chattanooga & St. Louis, with Col. Henry.

A. G. Teets (right), division superintendent at Cleveland for the New York Central, accepting from Mr. Fitzgerald the certificate for award won by the Cleveland Union Terminal.

Left to right: L. H. Pickryl, R. N. Wilson and E. A. Esper, personnel director, general manager and secretary and treasurer of the River Terminal, with Mr. Patterson.

winning records. Safety committees were formed to work closely with supervisory personnel, suggestions were heard and considered, and every effort made to correct conditions which might invite accidents. As the drive gathered momentum its scope was broadened to include the families of the employees, shippers, civic groups and school children in on-line communities. The typical safety meeting accommodated anywhere from 300 to 600 employees. When enlarged to take in family groups and the general public, a single audience numbered as many as 4,300. The effect of this broader approach was twofold: Company personnel had evidence of the sincerity of the company's desire to promote safety as a worthy cause and the public had reason to look with greater appreciation and confidence upon the railway's contribution to the community."

The Canadian Pacific does not try to attain its safety goals by forcing everyone and everything into a uniform mold, Mr. Crump said when accepting the gold medal for Class B railroads. Rather, he continued, "we look to the cooperative efforts of properly trained men who are impelled by a sincere desire to see the safest possible operation. Our experience would indicate that this attitude is attaining success and in general is the method used on this continent. The motivating force—soul, if you will—of the railroad is the working force that mans it. Rolling stock, yards, stations, freight sheds, right-of-way, signal systems and all the thousand and one material things of our calling are only tools used by the men who make the railway run. The answer to safety cannot be found in the physical aspects alone."

"Of great importance in such a campaign," Mr. Crump concluded, "is leadership. Leadership that indicates the methods to be followed and adheres to them itself. This leadership must in the main come from the supervisory forces and must be the initiating force in our safety programs. I would, consequently, like to take this opportunity to congratulate Superintendents F. E. Bailey [of the Brownville, Me., division] and L. R. Bangs [of the Farnham, Que., division] who are the responsible officers for the two divisions winning this award, and R. I. Greenfield, general superintendent of safety, loss and damage at Toronto, who is their technical advisor, for the excellent job they have done."

Safety Problems

The safety problems of the Colorado & Wyoming, a subsidiary of the Colorado Fuel & Iron Corp., are those peculiar to an industrial railroad, Mr. Wire told the assembled railroad officers and industrial leaders. "Through the tireless efforts of our safety supervisor . . . our weekly safety inspection tours by the superintendent accompanied by the different supervisory personnel, our weekly department safety meetings, the showing of safety films and the posting of accidents on all bulletin boards, our employees sincerely believe that the best way to do any job is the safe way. . . . There has been built up among our employees a feeling of unpopularity for those of their fellow workers who do not observe safety practices. Our greatest effort, individually or collectively, reaches its final influence only when the ambition of accomplishment is rewarded by an enviable safety record. This medal is the stimulation for greater and continued efforts in the field of conservation of humanity."

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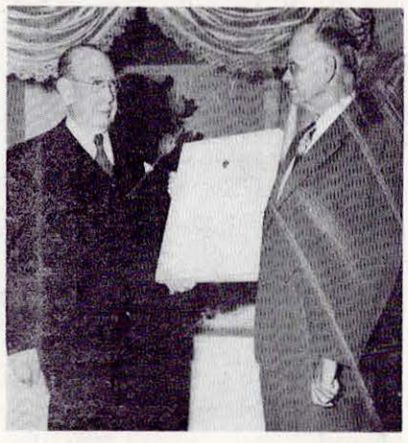

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Certificates of commendation were awarded as follows: In the Eastern district—Reading (Class A), accepted by J. A. Fisher, president; Pennsylvania-Reading Seashore Lines (Class B), accepted by Harry Babcock, general manager; Cambria & Indiana (Class C), accepted by Paul A. Trageser, first vice-president; Southern district—Norfolk & Western (Class A), accepted by R. H. Smith, president; Nashville, Chattanooga & St. Louis (Class B), accepted by W. J. McWhorter, general manager; Tennessee Central (Class C), accepted by J. Lewis Armstrong, senior vice-president; Western district—Great Northern (Class A), accepted by John M. Budd, president; Denver & Rio Grande Western (Class B), accepted by Wilson McCarthy, president; and Texas Mexican (Class C), accepted by W. C. Beaman, vice-president and traffic manager.

The Cleveland Union Terminal received the award for Group ST-1, and it was accepted by A. G. Teets, division superintendent at Cleveland for the New York Central. R. N. Wilson, general manager of the River Terminal (Group ST-2), accepted the certificate awarded to that company.

The Arthur Williams Memorial Medal, a personal safety award, this year was presented to H. William Heinrich, assistant superintendent, engineering and inspection division, Travelers Insurance Company. Cyril Ainsworth, president of the museum, who presided at the dinner, made the presentation to Mr. Heinrich.

Mr. Hungerford, in accepting the gold medal awarded the Frisco, said: "The beginning of our company's intensified drive to advance the cause of accident prevention dates back to 1947—soon after the Frisco emerged from trusteeship. At that time the casualty ratio per million man-hours worked stood at 12.31. Five years later, or by the end of 1951, it had been reduced to 4.91, less than half of what it had been. . . . Several factors influenced that reduction. Throughout that five-year period the physical composition of the plant was undergoing considerable change as the tools of technology made possible a degree of modernization unequalled in any comparable period in the company's history. . . . A safety department was created, and adequately staffed, under direction of a superintendent of safety, Roy P. Hamilton.

"The years and months which followed," Mr. Hungerford continued, "saw an educational campaign which utilized such media as motion pictures and radio, posters and pamphlets and a full coverage of safety activities in the company-sponsored employee newspaper. To stimulate competition among company forces, safety performance was put on a contest basis and a set of awards was rotated among the various departments which posted

George M. Kevlin (left), and J. Lewis Armstrong (second from right), general counsel and senior vice-president, respectively, of the Tennessee Central, with Col. Henry (second from left), and Mr. Patterson.

R. H. Smith (right), president of the Norfolk & Western, and Col. Henry.

W. J. McWhorter (second from right), R. H. Short (right), and W. H. Street (left), general manager, superintendent of safety and engineman of the Nashville, Chattanooga & St. Louis, with Col. Henry.

A. G. Teets (right), division superintendent at Cleveland for the New York Central, accepting from Mr. Fitzgerald the certificate for award won by the Cleveland Union Terminal.

Left to right: L. H. Pickryl, R. N. Wilson and E. A. Esper, personnel director, general manager and secretary and treasurer of the River Terminal, with Mr. Patterson.

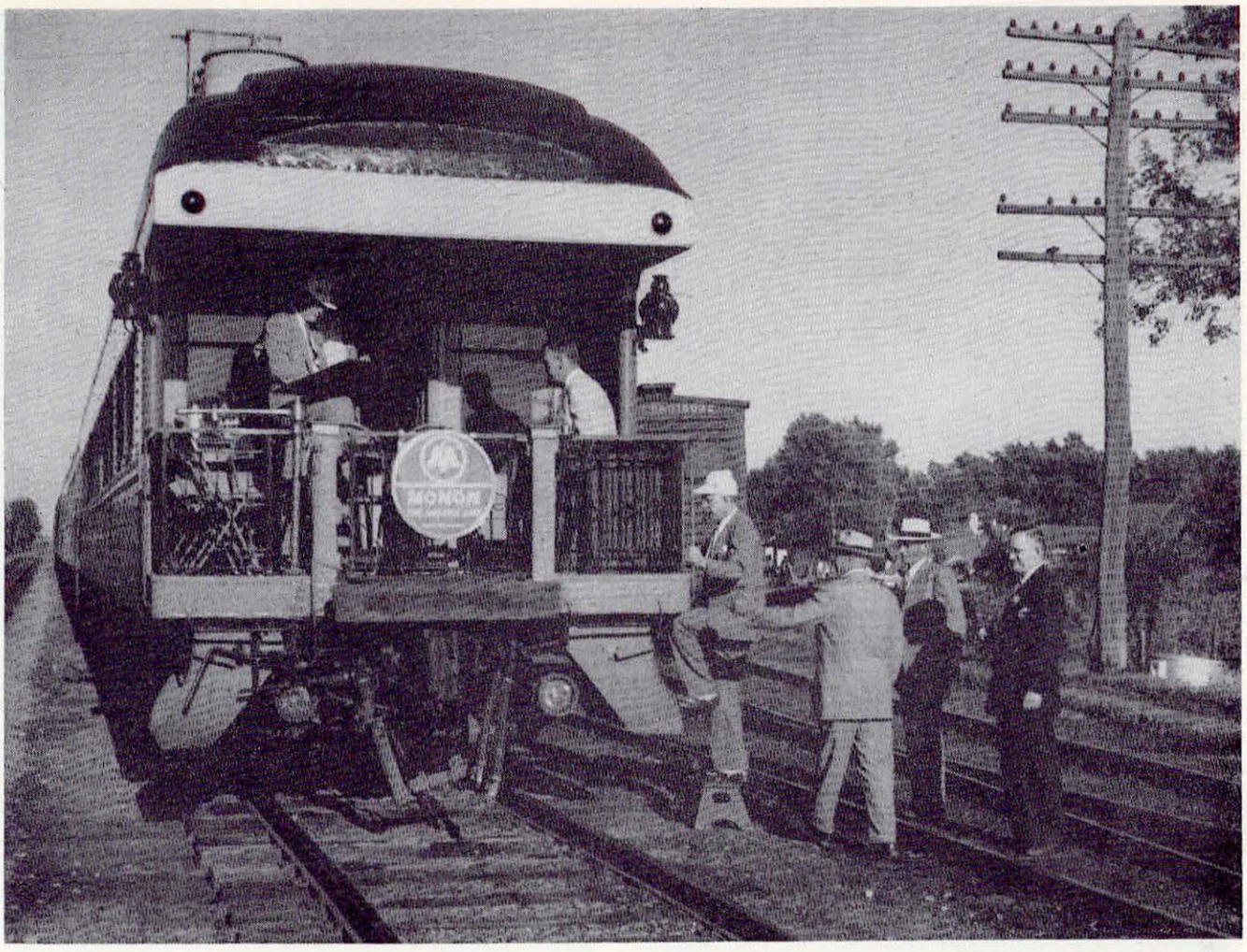
winning records. Safety committees were formed to work closely with supervisory personnel, suggestions were heard and considered, and every effort made to correct conditions which might invite accidents. As the drive gathered momentum its scope was broadened to include the families of the employees, shippers, civic groups and school children in on-line communities. The typical safety meeting accommodated anywhere from 300 to 600 employees. When enlarged to take in family groups and the general public, a single audience numbered as many as 4,300. The effect of this broader approach was twofold: Company personnel had evidence of the sincerity of the company's desire to promote safety as a worthy cause and the public had reason to look with greater appreciation and confidence upon the railway's contribution to the community."

The Canadian Pacific does not try to attain its safety goals by forcing everyone and everything into a uniform mold, Mr. Crump said when accepting the gold medal for Class B railroads. Rather, he continued, "we look to the cooperative efforts of properly trained men who are impelled by a sincere desire to see the safest possible operation. Our experience would indicate that this attitude is attaining success and in general is the method used on this continent. The motivating force—soul, if you will—of the railroad is the working force that mans it. Rolling stock, yards, stations, freight sheds, right-of-way, signal systems and all the thousand and one material things of our calling are only tools used by the men who make the railway run. The answer to safety cannot be found in the physical aspects alone."

"Of great importance in such a campaign," Mr. Crump concluded, "is leadership. Leadership that indicates the methods to be followed and adheres to them itself. This leadership must in the main come from the supervisory forces and must be the initiating force in our safety programs. I would, consequently, like to take this opportunity to congratulate Superintendents F. E. Bailey [of the Brownville, Me., division] and L. R. Bangs [of the Farnham, Que., division] who are the responsible officers for the two divisions winning this award, and R. I. Greenfield, general superintendent of safety, loss and damage at Toronto, who is their technical advisor, for the excellent job they have done."

Safety Problems

The safety problems of the Colorado & Wyoming, a subsidiary of the Colorado Fuel & Iron Corp., are those peculiar to an industrial railroad, Mr. Wire told the assembled railroad officers and industrial leaders. "Through the tireless efforts of our safety supervisor . . . our weekly safety inspection tours by the superintendent accompanied by the different supervisory personnel, our weekly department safety meetings, the showing of safety films and the posting of accidents on all bulletin boards, our employees sincerely believe that the best way to do any job is the safe way. . . . There has been built up among our employees a feeling of unpopularity for those of their fellow workers who do not observe safety practices. Our greatest effort, individually or collectively, reaches its final influence only when the ambition of accomplishment is rewarded by an enviable safety record. This medal is the stimulation for greater and continued efforts in the field of conservation of humanity."



"HOOSIER HOSPITALITY SPECIAL" works to benefit the whole railroad industry.

The Monon "Barnstorms" For Good Will and Traffic

We want our patrons, shippers and friends to regard the Monon as a good neighbor and to know that its management is always available—easy to find and talk to. By visiting each community with our 'Hoosier Hospitality Special,' we can provide a congenial background for an informal meeting where we can all get better acquainted. We have found, too, that this train gives a 'lift' to members of our own railroad family."

This is the reason given by the Chicago, Indianapolis & Louisville for venturing into a new form of public and community relations—a "Town Meeting of the Rails" that literally "takes the Monon" on a visit with citizens of every community along its 540-mile system.

With the exception of its three terminal cities (Chicago, Indianapolis and Louisville), most of the Monon's on-line communities are comparatively small. Only one (Hammond, Ind.), has a population exceeding 30,000. During the past six years, officers of the Monon have actively participated in community affairs all along the line and have frequently availed themselves of opportunities to extend, as well as to accept, such hospitalities as local occasions and facilities provide.

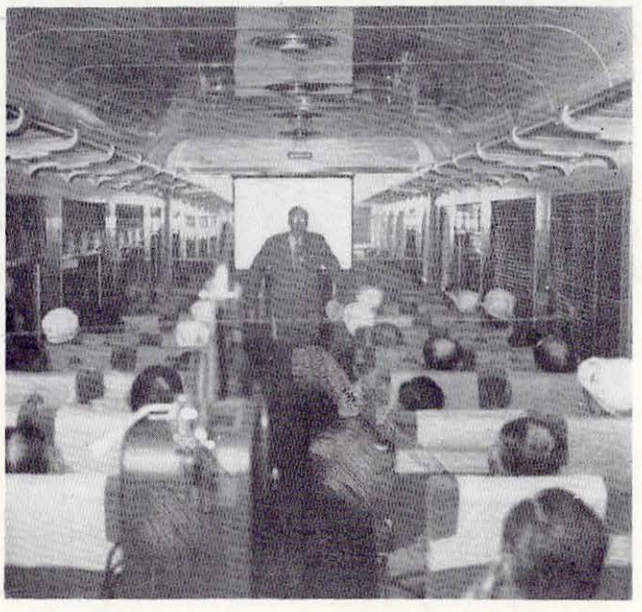
However, the management, in planning the "Hoosier Hospitality" operation, believed that effectiveness of the series of breakfast, luncheon and dinner meetings would be greatly enhanced by having them stamped with the individuality of the road's own service and equipment. Extending equivalent entertainment at the local hotel would be providing a setting and a menu that were "old hat." A special train, on the other hand, would provide the originality, which, coupled with a good dining car meal, would make each meeting a treat long remembered.

Because the Monon wanted to present an informal "annual report" of its progress, hopes and ambitions, together with a summary of the problems of the railroad

Welcomed aboard by the officers of the road, guests are . . .

given a pin-on name tag and souvenir engineer's cap . . .

and a regular dining car meal before the meeting begins . . .



in this coach fitted to show Monon film "The Hoosier Line."

industry—and the public interest in their solution—to representative citizens in each of the larger communities which it serves, "Operation Barnstorm" was tested—successfully—during August.

Physical Means

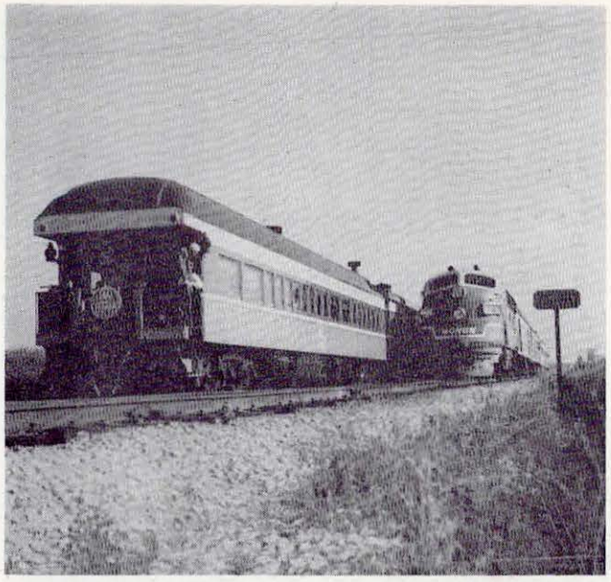
The train itself consisted of a single-unit passenger locomotive, a power car to furnish steam and electricity independent of the locomotive, a 12-section sleeping car as dormitory for the service crew, an air-conditioned reclining seat coach outfitted to show motion pictures, a dining car and the line's single business car.

Aboard were most of the road's top officers—including a spokesman for, if not the head of, each department.

Two itineraries, of three days each, carried the train to a total of 14 communities. These, plus other one-day trips, completed the program. On a typical day the train was scheduled for three meetings: a breakfast starting at 7:30 a.m., a luncheon about noon and a dinner about 6:00 p.m.—the hours being selected to prevent too much interference with business hours of the guests. With a total of about 40 guests invited to each meeting, the trip made it possible for officers of the road to meet more than 100 persons each working day—close to a thousand for the entire program.

Selection of those invited at each community was left entirely to the local agent and traffic representative covering that area. Insofar as the guests were concerned, these Monon representatives were *the* hosts. A list of everyone expected was aboard the train and small pin-on tags were prepared for each. These tags, plus Monon engineer's caps, which were distributed to officers and guests alike, gave the meetings a note of informality.

Many of the guests were not shippers. Members of the clergy, editors of local weekly papers, principals of



While awaiting this "meet," Mr. Barriger and Mr. Brown. . .

discuss lease terms on a small parcel of railroad land.

Each open meeting covered different ground. Here Hammond, Ind., reporters arrange a group photo.

schools, merchants and leaders in business and civic life in each of the communities were sought out—because a major objective of the meetings was to acquaint molders of local opinion with railroad *industry* problems.

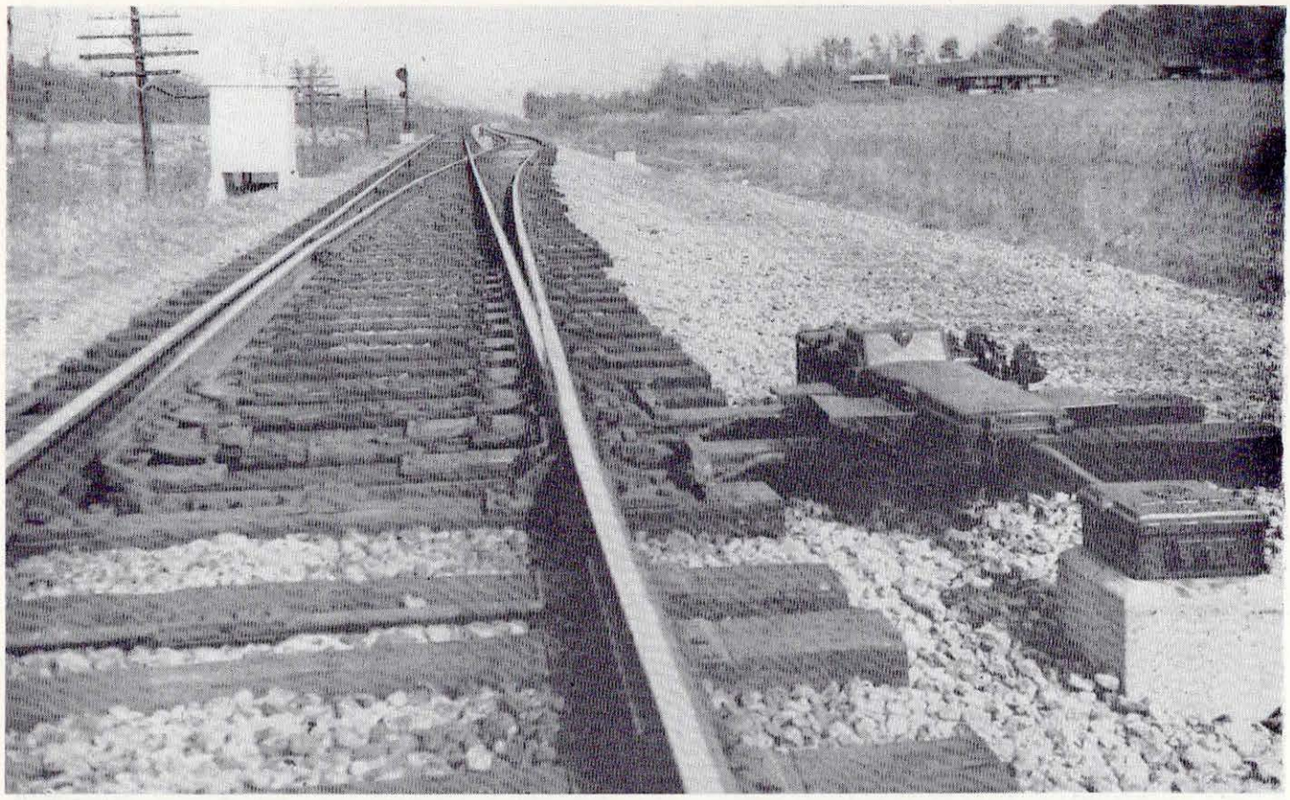
Many Topics Informally Discussed

At the conclusion of each meal, Warren W. Brown, vice-president, informally introduced the road's official family to the guests. Following this, President John W. Barriger would talk informally about the state of the railroad, referring, wherever possible, to local facilities and services of interest to those present. Then, relating the Monon to the railroad industry as a whole, he would show how the welfare of the industry was of direct concern to everyone. "It is a surprisingly short step from nationalized railroads to collectivized farming."

At the conclusion of his talk, Mr. Barriger would "open the town meeting" by asking the guests to "consider yourselves honorary stockholders and directors of the Monon and let us know how we can do a better job of serving you."

The comments, suggestions and complaints that ensued covered a wide range of topics—the physical condition of highway crossings, rate matters, l.c.l. service, yard relocations, passenger service, new station proposals, car shortages—to name but a few. Every issue raised would get a straightforward answer either from Mr. Barriger or from the appropriate member of the staff. A showing of the Monon's latest color film topped off each of the evening meetings.

That the train had done its job well was evidenced in the remark of one guest who, upon leaving, said: "These people are so disarmingly frank and friendly, you can't help but like them—and want to deal with them."



Typical end of a new siding, showing ballast of second main track that was removed.

C. T. C. on Southern

Frees 48 Miles of Second Track

Important sidings equipped with power switches at both ends; others have power switch at one end and spring switch at the other

Faced with shortages of materials, the Southern has secured good used rail, ties and ballast for use elsewhere, by removing extended sections of second main track from the Alabama Great Southern line between Birmingham and Meridian, Miss. This was practicable because installation of centralized traffic control increased capacity of remaining single track to handle traffic efficiently.

Altogether 48 miles of second main track was removed. Added to existing single track, this operation left one section of single-track main line, 137 miles long, on which centralized traffic control has been installed. This territory is a part of two important Southern routes: (1) from Washington via Atlanta to New Orleans; and (2) from Cincinnati via Chattanooga to New Orleans. The schedules include 6 passenger trains and 10 freights, totaling 16 trains daily, in addition to occasional extra trains.

The ruling grade northward, ranging up to about 1.0 per cent, extends for 28 miles north from Tuscaloosa to Woodstock. A southward ascending grade, ranging up to 0.85 per cent, extends for about 6 miles south from Smith. Some sections, up to 4 miles long, are tangent, but generally speaking the subdivision has numerous curves ranging up to about 3 degrees. Four curves just north of Parker exceed 3 degrees, two being 4 degrees. The track is in good condition, with crushed stone or slag ballast, solid ties, and 112 and 115 lb. rail. The maximum permissible speed is 80 m.p.h. for streamlined passenger trains, 70 m.p.h. for conventional passenger trains, and 60 m.p.h. for freights.

Automatic block signaling previously in service in this territory was arranged for right-hand running on the double-track, and "either-direction" on the single track. Train movements were authorized by timetable and train orders.

The automatic signaling included intermittent-inductive automatic train stop, which has been carried over in the new signaling system. Spring switch mechanisms were previously in service at the ends of double track and at the ends of the principal sidings on the single track.

Track changes were made progressively, prior to the installation of the centralized traffic control. The two main tracks were left in service on the first 13 miles

south from Birmingham to Burstall, where the AGS is crossed by a secondary single-track line of the Southern. This crossing consists of two single switches and a crossover. This crossover is the new end of double track. A section of the previous southward main, extending south from the crossover, was left in place as a siding. From the south end of this siding, double track was converted to single track for 20 miles to Vance, except that the second track was left in place to form new sidings at some places.

Single track was previously in service for 89 miles from Vance to York. Starting at the south edge of York, double track was converted to single track for 23 miles to Breyer, which is the north yard limit, 2 miles north of Meridian.

On the entire project, there are seven new sidings; nine sidings were lengthened; eight old sidings were removed and two were left in place as house tracks. Rail from the second track was used on other divisions to release relay rail which in turn, was used in the construction of a new classification yard at Birmingham. About 80 per cent of the ties and much of the slag ballast removed from the second track were likewise used in the construction of this new yard.

Operating 137 Miles by C.T.C.

The new C.T.C. system provides for train operation by signal indication on the 137 miles of single track between the end of double track at Burstall and the end of double track at Breyer (Meridian). Previously, there was a mechanical interlocking at Burstall, which included a crossover and two single switches. This plant was removed, and, as part of the C.T.C., new electric switch machines and light signals were installed, with a spring switch and new light signals at the south end of the new siding south of the crossover.

At lap siding layouts at Akron and York, trains normally enter the sidings at power switches at the "far" ends, and leave by trailing through spring switches at the "lap." The signal arrangement at the lap at York is shown in Fig. 2. The signaling at the power switches is conventional. The southbound Leave-siding Signal 9R consists of a searchlight signal mechanism and a red marker light below it, so that the aspect normally displayed is red-over-red. When a southbound train on this siding is to be authorized to leave, the dispatcher sends out a control to Signal 9R to extinguish the red marker lamp and to clear the top "arm" to display green, if a train of the same direction has cleared two or more blocks ahead, or yellow, if only one block. The train on the siding is thus authorized to trail out through the spring switch, and depart.

At five of the principal single sidings, power switch machines and conventional arrangement of C.T.C. lever-controlled signals were installed, as shown in Fig. 3. At those sidings intended primarily for use in one direction, a power switch was installed at one end, and a spring switch (previously in service) was left in place at the other end—at Burstall, Kimbrell, Coaling, Box Springs, Hull, Moundville and McClure. As Fig. 4 shows (layout at Box Springs), when a northbound train is to be directed to enter the siding, the dispatcher sends out a control which reverses Switch 60 and displays a red-over-yellow aspect on Signal 59L, as well as an Approach aspect on the signal in approach, Signal 1944. When a southbound train on this siding is to be directed to leave, the dispatcher sends out a control to reverse Switch 60 and to clear the southward searchlight type Leave-siding Signal 59RC to display either yellow or

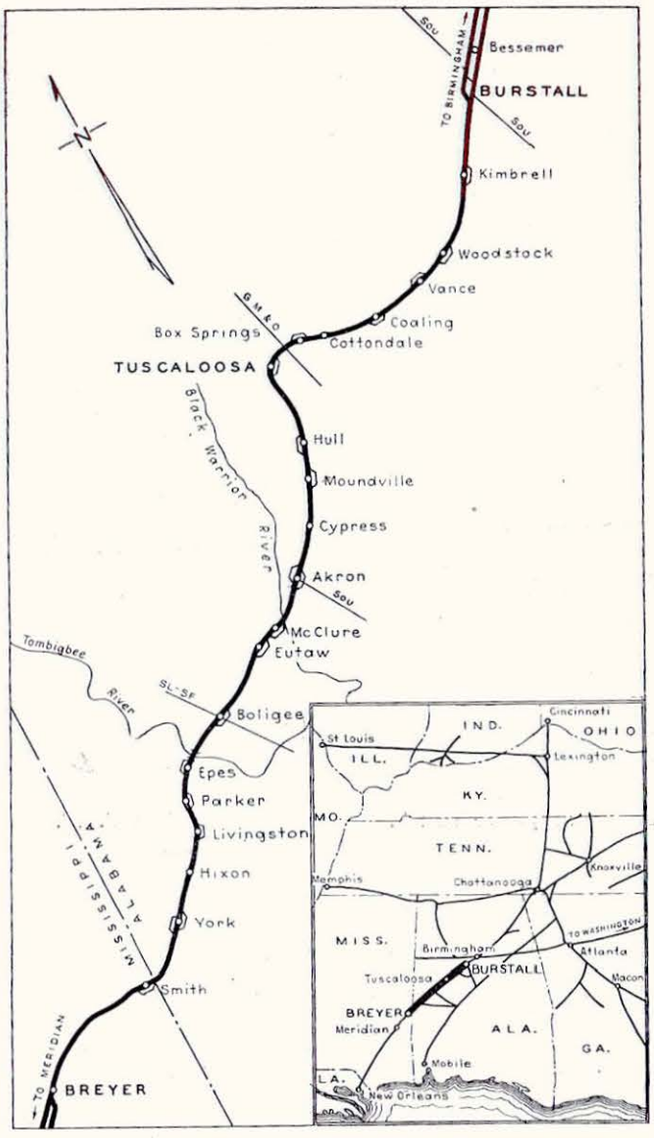


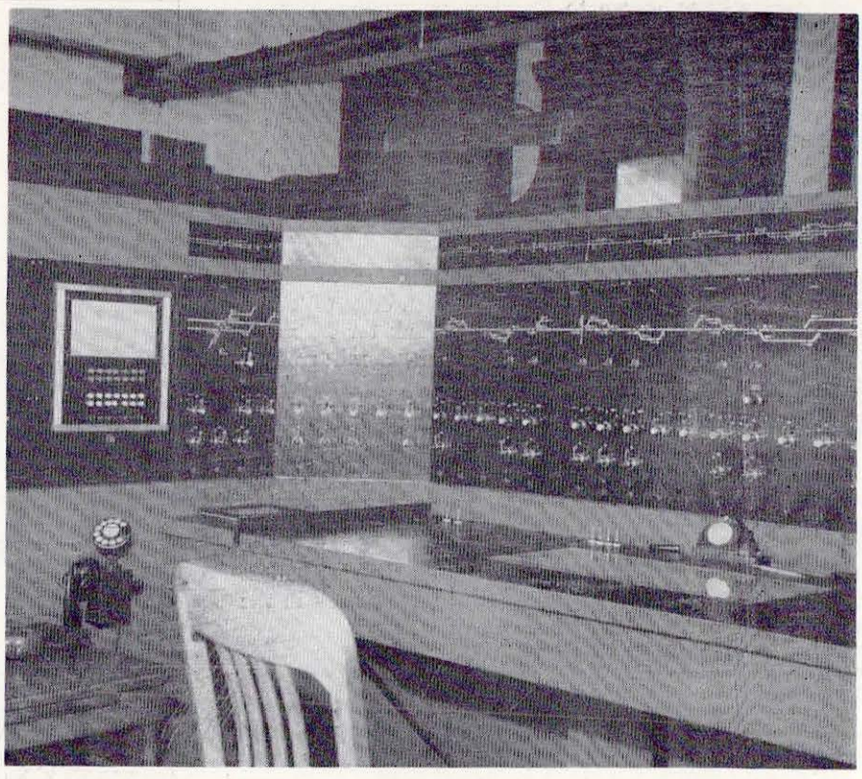
Fig. 1—Map of the territory between Birmingham and Meridian.

green, depending on the occupancy of the blocks ahead.

Again referring to Fig. 4, when a northbound train on the siding at Box Springs is to be directed to leave, the dispatcher moves signal lever 61 to the left and sends out a code control for the northward Leave-siding Signal 61L, which has three lamp units. The top and bottom units are normally lighted red. When the control to clear this signal arrives, the red in the top and bottom units is extinguished, and the center unit is lighted yellow. This authorizes the train to trail out through the spring switch. The northward automatic block Signal 1916 (in Fig. 4) will be displaying green if a preceding train of the same direction has passed beyond two blocks, or yellow if only one block.

Ordinarily, a southbound train would not be directed to enter the siding at Box Springs but rather would be held on the main track at Signal 59R, and the northbound train directed to the siding. However, if need be, a southbound train can be directed to enter siding at the north end of Box Springs. In such an instance, the dispatcher sends out a control to cause southward Signal 1917 to display red (Stop-and-Proceed indication) and

Signal at power switch.



The C.T.C. control machine is in the dispatcher's office at Birmingham.

the Take-siding Indicator 61R on the mast of 1917 to display the letter "S." The signal in approach would display the Approach aspect. These aspects direct the approaching southbound train to stop short of Signal 1917. The head brakeman operates the hand-throw switch stand to reverse the switch, and after the train is in the clear on the siding the switch is placed normal.

Two short sidings, at Vance and Epes, were left in service for the meeting of short local freights and passenger trains. At these two sidings, the previous spring switches were left in service at both ends, and signals were installed as shown in Fig 5. One line-code field station controls all the signals at both ends. When a southward train on this siding is to be directed to depart, the dispatcher sends out a control which causes the top "arm" of Signal 67RC to display either yellow or green, depending on the occupancy of blocks ahead. This authorizes the train to trail out through the spring switch, without stopping, and proceed southward on the main track. If a northbound train is to be directed to enter this siding at Vance, the dispatcher sends out a code control that causes the upper two units on Signal 67L to be lighted red, and the bottom unit to display an illuminated letter "S" on a black background on the glass cover of a lamp unit. At the same time, a yellow Approach aspect is displayed in Signal 1814 in approach. These aspects direct an approaching northbound train to stop short of Signal 67L, and the head brakeman operates the hand-throw switch so the train can enter the siding. After the rear of the train is in the clear, the brakeman returns the switch to normal.

Ordinarily, trains would not be directed to enter the north end of the siding at Vance, but rather would be advanced to the next siding, Coaling, which has a power switch at the north end. However, if need be, the dispatcher can direct a train to enter the north end of Vance. To do this, the dispatcher sends out a control which causes a red to be displayed on the top "arm" of southward Signal 1779 and an "S" is displayed in the Take-siding Indicator 69R on the mast of this signal. Also, the signal in approach, 1757, is controlled to display the Approach aspect.

Switch Mechanism and Train Stop System

Each of the power switches is operated by a dual-control electric switch machine with a 24-volt d.c. motor. Adjustable rail braces, made by either Stiles or Bethlehem, are used on three ties, including the No. 0 tie, on which braces are used also on the gage side of the rail. The switch plates are lubricated with graphite. The spring switches are operated by oil-buffer mechanisms made by Pettibone-Mulliken Company. These mechanisms are connected as the throw rods. The switch stands are the Bethlehem Model 53A. Main track hand-throw switches connecting to industry spurs and freighthouses are each equipped with an electric lock, a total of 43 switches being so equipped in the Burstall-Meridian territory. A Hayes derail is located at the clearance point on each of these turnouts.

An intermittent, automatic inductive-type train-stop system has been in service on this territory for about 24 years. As part of the recent program, this automatic train-stop equipment was applied to the new single-track centralized traffic control. A train-stop inductor is about 60 ft. in approach to each main track high signal, and about 60 ft. in approach to each leave-siding signal.

The train-stop equipment on each locomotive includes an inductive receiver that passes directly over each wayside inductor. If the signal being approached is dis-

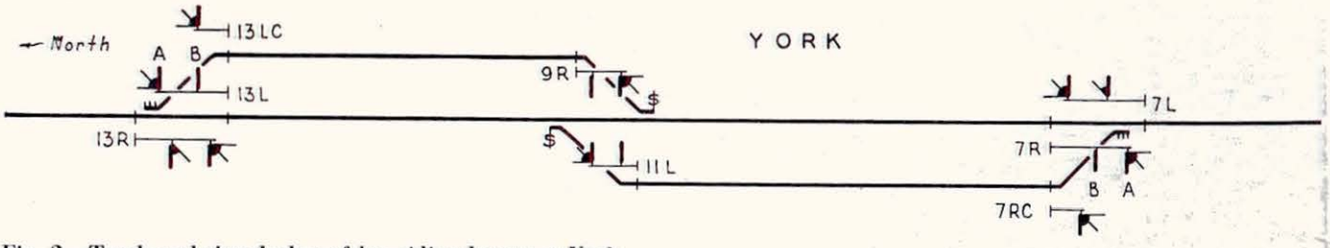


Fig. 2—Track and signal plan of lap siding layout at York.

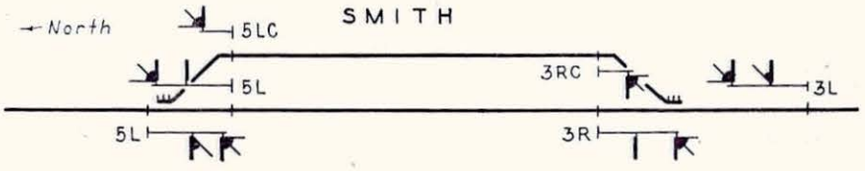


Fig. 3—Signaling at siding with power switch at both ends.

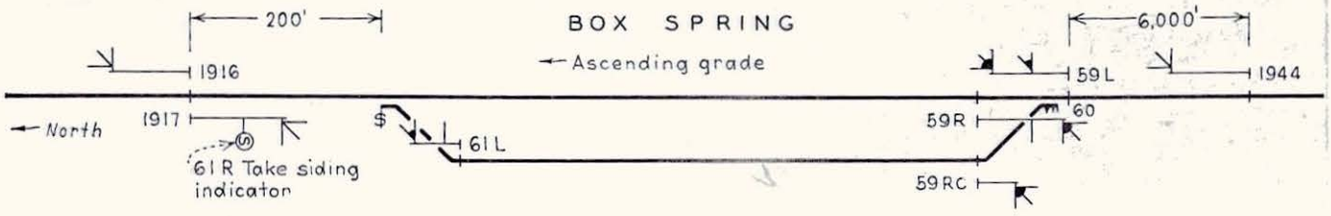


Fig. 4—Power switch at one end and spring switch at the other.

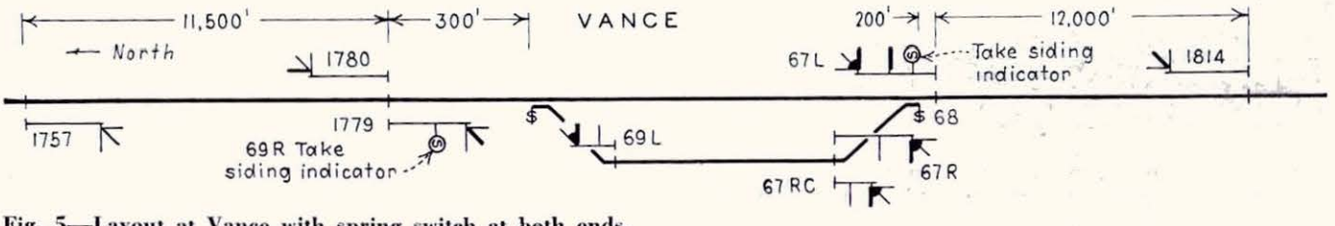


Fig. 5—Layout at Vance with spring switch at both ends, but only one end controlled.

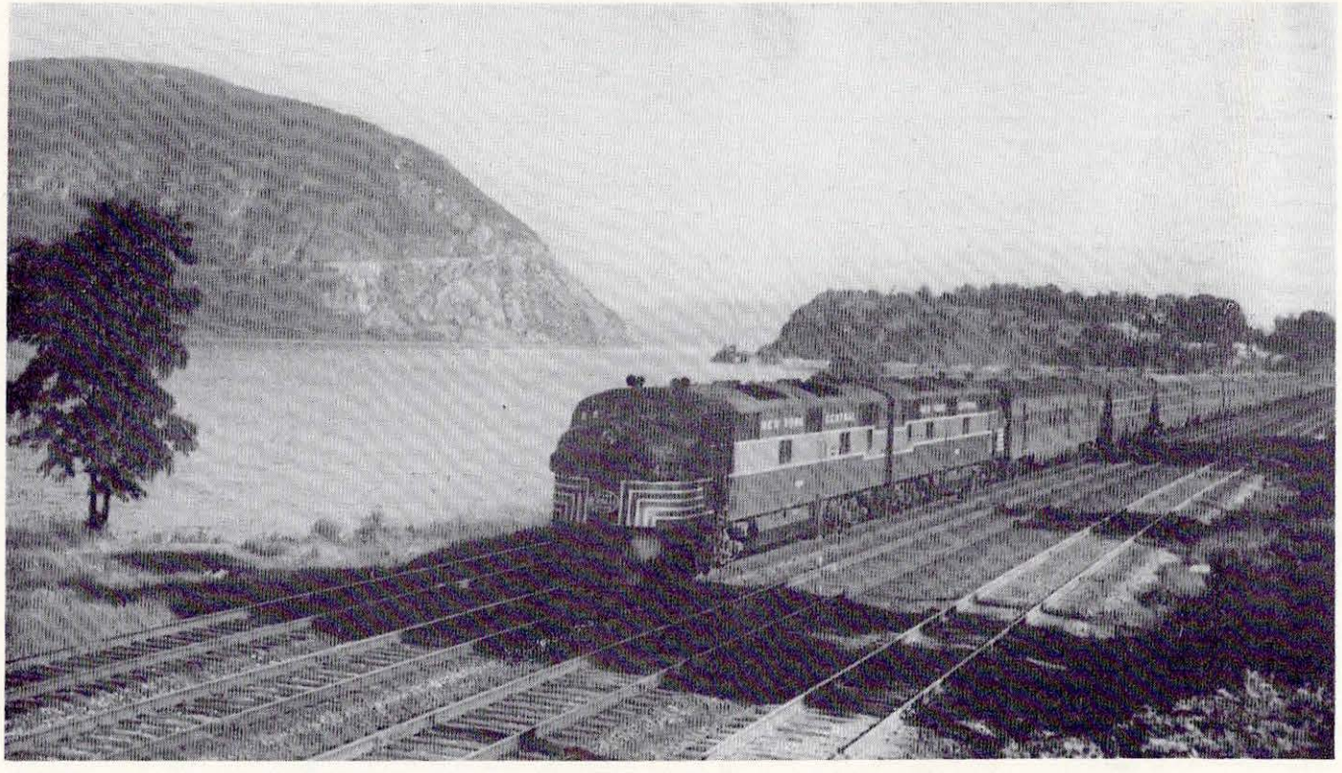
playing a green aspect, no impulse is registered on the locomotive equipment, and no application of the brakes is made. If a signal is displaying an Approach or a Stop aspect, an impulse is received on the locomotive, and unless the engineman acknowledges the indication while passing over the inductor, the brakes are automatically applied. A whistle is sounded when the inductor is acknowledged.

Control Machine at Birmingham

The C.T.C. control machine for the entire 137 miles between Burstall and Breyer (Meridian) is in the dispatcher's office in the Southern's building in the main business section of Birmingham. The center panel of this machine is 5 ft. long with a wing section at each end, so that the total panel length is 14 ft. A 14-in. panel section is provided for communication equipment.

In the illuminated track diagram, red lamps are lighted to indicate track occupancy of "OS" detector sections at ends of sidings and ends of double track. Opal lamps indicate occupancy of other track sections. Controlled sidings are equipped with track circuits, and the track lamps, on the dispatcher's panel, indicate occupancy of these sidings. Forty levers control signals; 21 levers control power switches at sidings; 1 lever controls a power crossover; and 2 levers control junction switches at Burstall. Four switch levers are for establishing route selections at spring switches. Three levers are for control of electric locks at hand-throw main track switches, leading from spurs and house tracks.

This centralized traffic control was planned and constructed by Southern forces under the jurisdiction of L. C. Walters, assistant to vice-president—signal and electrical, and under the direction of H. A. Hudson, signal and electrical superintendent, Lines West. Signal Supervisor B. G. Webb, and former Supervisor A. N. Goodson, together with Construction Supervisors R. H. Youngblood and W. Linn, had direct supervision of construction forces. Foremen in charge of construction crews included E. G. Alexander, T. R. Waller, C. J. Dulaney, W. W. Lewis, E. C. Logan and T. E. Sneed. The major items of signal equipment were furnished by the General Railway Signal Company.



Training of employees in operation and maintenance of diesel locomotives and refinement of diesel locomotive operating and maintenance practices have taken the lion's share of the program time of the associations dealing with motive-power subjects.

Nearly 3,800 at Coordinated Associations Meetings

The Coordinated Mechanical Associations held their annual meetings in Chicago September 15 to 17 inclusive, with a record attendance of 2,624 railroad men and railroad guests and 1,163 supply men. These were meetings of the Air Brake, Car Department Officers', Locomotive Maintenance Officers', Master Boiler Makers, and Railway Fuel and Traveling Engineers Associations and the Electrical Sections of the Association of American Railroads. All of the sessions were held at the Hotel Sherman except those of the Air Brake Association, which met at the Morrison Hotel. This year's exhibit, at the Hotel Sherman, was under the auspices of the Railway Electric Supply Manufacturers' Association.

On the second day of the meeting John P. Kiley, president of the Milwaukee, was the principal speaker at the Presidents' Luncheon at the Hotel Sherman. Mr. Kiley, with an audience entirely of mechanical men, dealt specifically with their problems. He voiced some concern about the training of diesel operating and maintenance forces for the future. With our technological improvement, he said, more highly trained men are needed in all departments, and such men are hard to find. Mr. Kiley then mentioned many instances, such as steam hose, couplers, window glass for locomotives, pipe fittings, battery boxes and filters where the progress of standardization has not gone far enough to avert expensive delays because parts do not fit.

Hot boxes, said Mr. Kiley, continue a most pressing problem and it is important to find the cause. On one road at least, the higher speeds incident to diesel operation were suggested as the cause of a lot of hot boxes, but another road reported, "We don't operate a single diesel locomotive but we've got more hot boxes today than we've had in years."

Locomotive Maintenance Officers Meeting

H. H. Magill, superintendent motive power, C&NW presided at the opening session and after brief remarks concerning the work of the association and its opportunities for future service introduced the "chairman of the day."

At the first day's sessions of the Locomotive Maintenance Officers Association reports were presented on personnel training, oil leaks and crankshaft failures in diesel engines and diesel parts reclamation. The first morning session was addressed by W. J. Patterson, member of the Interstate Commerce Commission. He reviewed the progress made over 35 years in enforcement of regulations intended to improve the safety of

railroad operation. In 1907, 4,534 railway employees lost their lives whereas in 1950 fatalities were 390, the all-time low. Injuries to employees, likewise, have been materially reduced. Commissioner Patterson appealed for cooperation in efforts toward further progress in safety.

The second and last day's sessions heard reports on shop tools, diesel locomotive cleaning, improving the performance of steam locomotives, diesel maintenance facilities and, in a joint session with the Electrical Section, wheel-slip detection and the causes and prevention of generator flashovers.

Davidson Talks on Teamwork

At another session E. H. Davidson, director of the I.C.C. Bureau of Locomotive Inspection, emphasized the importance of teamwork in railroad operations.

"After a lifetime of work connected with locomotive operation and maintenance, the major part of which involved furtherance of locomotive safety," he said, "I have been impressed with the great number of instances where the victims of accidents were not primarily responsible for the basic cause of the accident. It is an ironic turn of fate that makes one man suffer because of the shortcomings or neglect of another. This is particularly true of railroading where one group maintains equipment that is operated by other members of the railroad team. If an indicated repair to correct a defective and potentially dangerous condition is not made or is made inadequately or in an indifferent manner and an accident involving casualties occurs, the place of accident may be, and often is, remote from the point where repairs were called for. . . .

"I wish to call attention to some of the developing types of defects in diesel power which have been responsible for accidents and casualties and which should be carefully watched. The transition from steam to diesel power has been extremely rapid and the trend still continues. This change has developed many troublesome problems because of the closer tolerances found in diesel engines and the amount of electrical equipment involved.

"With exception of the oil-fired flash type heating boilers used on diesel units which have been responsible for relatively few accidents, there is not the danger of accident from large volumes of high-pressure steam encountered in steam locomotive practice. The majority of accidents in connection with diesel-electric units have, to the present, fallen into the categories of those caused by wheel failures, bearing failures, electrical equipment, falls, crankcase explosions and fires. . . .

"Based on the record of two serious derailments caused by broken wheels and failure of a considerable number of other wheels I would say that defective wheels constitute a source of major potential hazard in diesel operation. As of September 1 of this year we have record of 185 cracked and broken diesel wheels that have been brought to our attention by railroad representatives and our inspectors. Failure in service of any one of these wheels could have been the cause of a serious accident, so the gravity of the situation is apparent. I urge that all attention be given to inspection of diesel wheels by railroad mechanical forces. The problem of detection of defective conditions rests with the railroad mechanical forces if the situation is to be controlled."

H. H. Magill, superintendent motive power of the Chicago & North Western, presided at the opening session of the L.M.O.A. Officers elected for the coming year are: President, S. M. Houston, assistant general superintendent motive power, Southern Pacific; first vice-president, F. D. Sineath, assistant general superintendent motive power, ACL; second vice-president, T. T. Blickle, mechanical superintendent—Coast Lines, AT&SF; third vice-president, J. T. Daley, superintendent motive power, Alton & Southern; and fourth vice-president, F. Thomas, assistant to general superintendent equipment—diesel electric, New York Central system. C. M. Lipscomb continues as secretary-treasurer of the organization. C. J. Wolfe, superintendent motive power, Western Maryland, was elected to the executive committee for a two-year term.

The Car Officers' Meeting

W. N. Messimer of Merchants Despatch Transportation Corporation, president of the Car Department Officers Association, said in opening its meeting that the association is now recognized as a going concern with a present membership of 1,165 individual members, with sound if somewhat limited finances and an increasing influence for the improvement of railway car conditions generally. A. E. Wright, president and general manager of Manufacturers Railway and St. Louis Refrigerator Car Company, spoke at the opening session on "Personnel and Personnel Problems," maintaining that this matter does not receive deserved attention on most railroads. He said it is no use to effect marked improvements through technical research and not develop trained men to put these improvements in practical use.

Mr. Wright urged that some means be found to encourage more promising young people to enter railway service: to develop supervisors with real qualities of leadership; and to educate, cultivate and stimulate men in the ranks. He said that most men are activated by something besides the dollar sign and it is the definite responsibility of management to create a place where men enjoy working, where a favorable "atmosphere" is maintained and men can take pride in their work.

The railroads, he said, have made roughly $7 billion in new capital investment since V-J day; How much has been spent on the human machine in that time?

Interchange and Loading Rules

The association gave its usual attention to details of the A.A.R. interchange and loading rules, and came up with specific recommendations for changes in the interest of simplification, promoting better service or reducing costs. The air conditioning report this year was devoted largely to details of the Spicer drive and the Safety genemotor, color slides being used very effectively to show important details of servicing and maintenance.

Two constructive reports related to conditioning cars for higher commodity loading and to an analysis of train yard operation from the car man's viewpoint. Among other data in the report on wheel-shop practices were specific recommendations for better tool maintenance and details of shop practice. The painting report stressed terminal painting of passenger cars; cleaning of all parts including air conditioning equipment prior to painting; and stencilling of both passenger and freight cars.

The following new officers were elected for the ensuing year: President, A. H. Keys, superintendent car department B&O; vice-presidents: R. Schey, general superintendent car department, Nickel Plate; J. F. Likarish, master car builder, Great Northern; E. E. Packard, district master car repairer, Southern Pacific (general shop), Los Angeles; and H. M. Nelson, general mechan-

ical superintendent, Fruit Growers Express Company; and secretary-treasurer, F. H. Stremmel, assistant to secretary A.A.R. Mechanical Division.

Air Brake Association

Leakage, both on the individual freight car and on the entire freight train, was a major concern of this year's meeting of the Air Brake Association held at the Hotel Morrison, Chicago. The effects of leakage, how best to measure it, how it can seriously interfere with good train handling, and what must be done to prevent it were the principal topics on the second day, along with a paper on standardization of air-brake systems on diesel locomotives regardless of builder or model.

Another highlight of the second day was an address to the members by J. W. Hawthorne, general superintendent of motive power and equipment, ACL, in which air-brake supervisors were told that one way to improve their department's performance is to become better salesmen.

Too often, he pointed out, air-brake men use highly technical language in requesting better equipment or additional men. The result is that they fail to make their case clear to the management, and thus fail to get approval of requests that would benefit their department and the railroad generally.

The opening day included a paper on the release control retainer as a means of better braking and a paper on how the association creates closer interest of air-brake men to the advantage of all. The Air Brake Association met in joint session on the first afternoon with the Railway Fuel and Traveling Engineers to hear a paper on freight and passenger train handling and dynamic braking, a subject on which the wide and highly informative discussion lasted two hours.

The closing day was devoted to the report of the committee on approved maintenance practices, a second maintenance paper confined to locomotive air compressors, a description of the brake-cylinder release valve and its operation, and a symposium on automatic freight-car slack adjustors.

Officers elected for the coming year were: President, R. F. Thomas, general air-brake instructor, Canadian Pacific; first vice-president, C. V. Miller, general supervisor of air brakes, Nickel Plate; second vice-president, D. R. Collins, superintendent air brakes, D&RGW; third vice-president, R. J. Dewsbury general air brake inspector, Chesapeake & Ohio; and secretary-treasurer, Lawrence Wilcox. New members of the Executive Board are A. M. Malgrem, general diesel and air-brake supervisor, Frisco, and F. R. Ellis, air-brake instructor, Reading.

Master Boiler Makers' 50th Anniversary

Adjusting itself rapidly to the loss to its organization created by dieselization, the Master Boiler Makers' Association celebrated its 50th anniversary by featuring both diesel and welding subjects in its program. President H. C. Haviland, supervisor of boilers, New York Central system—East, opened the 35th annual meeting of the association with an address that recognized conditions and at the same time predicted a place for the boilermaking craft in the diesel field. That the M.B.M.A. has accepted the challenge presented by dieselization was demonstrated at the meeting by the secretary-treasurer, A. F. Stiblmeier general supervisor boilers and welding, New York Central system, who reported that 127 new members, most of them in the welding and water service departments, had joined the organization during the past year.

The association had four guest speakers. Two—W. C. Wardwell, superintendent of equipment, Lines East, NYC, and E. H. Davidson, director of the I.C.C. Bureau of Locomotive Inspection—counseled the association members to train themselves for work in the diesel field. Mr. Wardwell brought out that the welding of diesel parts, steam generator and cooling water storage and treatment, and the steam generator itself are subjects to which the boiler-making craft can contribute its experience and knowledge.

Mr. Davidson said it is economically unsound not to utilize the trained services of men experienced in the boiler-making art. He suggested that because of his experience with heavy plate work that the boiler maker is particularly qualified to handle welding. Mr. Davidson also urged that vigorous efforts be made to promote safety and pointed out that careful inspection of the steam locomotives in service is essential because they are showing the effects of greater age.

The association was addressed also by C. T. DeWitt, superintendent of safety, Northern Pacific, and C. B. Peck, mechanical department editor of *Railway Age*, and editor of *Railway Mechanical and Electrical Engineer*. Mr. Peck reviewed the history of the Master Boiler Makers' Association and the steam locomotive boiler as a special feature of the association's 50th anniversary.

Of two papers about diesel maintenance, one dealt with the design of water tanks to facilitate inspection and washing and the other with welding and brazing diesel locomotive parts. Another paper of special interest covered the use of steam generators for stationary heating plants. This type of generator has become important for this service because its automatic features eliminate labor costs.

H. R. Barclay, general boiler inspector, Northern Pacific, was elected president for 1952-53. Three members of the Executive Board were re-elected to three-year terms: H. W. Chandler, locomotive inspector, Bureau of Locomotive Inspection; A. A. Edlund, general boiler inspector of the Milwaukee, and L. R. Seely, general boiler inspector, Union Pacific. M. R. Francis, general boiler maker Norfolk & Western, was elected to the Executive Board for a one-year term. A. F. Stiglmeier, general supervisor boilers and welding, New York Central System, was re-elected secretary-treasurer. Mr. Stiglmeier received a standing ovation for his outstanding and loyal service to the association as secretary-treasurer during the past 20 years.

Railway Fuel & Traveling Engineers

A heavy program of reports and papers occupied the Railway Fuel and Traveling Engineers' Association convention. A joint session with the Air Brake Association dealt with passenger- and freight-train handling, leaving four sessions for twelve papers and reports and three addresses.

In an address on employee and public relations, L. C. Porter, vice-president—operations of the Texas & Pacific, defined "public relations" as association with people. "The employees who come in contact with the public, whether on the trains, in the stations, or in the yards and offices, will not ordinarily be more interested in the maintenance of good employee and public relations than the officers who direct and supervise their work. Nor can junior officers be expected to be more

(Continued on page 54)

LITERATURE and PAMPHLETS Offered by *Railway Age* Advertisers

Following is a compliation of literature and pamphlets offered *free-of-charge* by advertisers in the five September issues. To receive the additional literature desired, merely circle the item number(s) on the card below.

884. Couplers
The Symington-Gould Corporation. Circular No. 1245 fully describes the Symington Type H Tightlock Couplers.

885. Diesel Locomotive Wire
The Okonite Company. Bulletin RA-2078A gives full details about construction and specifications of Okonite-Okoprene Type DEL Diesel Locomotive Wire for both conduit and exposed installations.

886. Steel Crossings
Blaw-Knox Div Blaw-Knox Co. Bulletin 2395 gives complete information on crossings and other railroad applications for Blaw-Knox Self-Cleaning Grating.

887. Heavy Duty Hot Tank Cleaner
Dearborn Chemical Company. Complete information on Dearborn Heavy Duty Hot Tank Cleaner No. 60 for use in Diesel shops and back shops.

888. Vibrator-Converter
Cornell-Dubilier Electric Corp. Catalog gives complete installation data on the Cornell-Dubilier vibrator-converter.

889. Brake Pipe Flow Indicator
The New York Air Brake Company. Complete information offered on the Type "B" Brake Pipe Flow Indicator.

890. Wrought Iron Pipe
A. M. Byers Company. Booklet "Wrought Iron For Piping Systems" discusses corrosive conditions encountered in various services and illustrates applications of wrought iron.

891. Electric Lantern
Adams & Westlake Company. Complete information on the No. 31 Electric Lantern offered in Bulletin B-105A.

892. Car Heating System
Vapor Heating Corporation. New informative brochure (Bulletin #567) "The Vapor Unizone System With Unit Radiation" contains the Unizone story—the open body car heating system.

893. Braided Wire Slings
Union Wire Rope Corporation. Free 3-foot sample and complete detailed story in the Tuffy Sling Handbook offered on Tuffy Slings by Union.

894. Rubber Draft Gears
Waugh Equipment Company. 28-page brochure "The Conquest of Impact" tells the story of development, testing and service performance of Waughmat Twin Cushion rubber draft gears—for passenger and freight service.

895. Heavy-Duty Portable Cable
American Steel & Wire Division, U. S. Steel. Complete information offered on U.S.S. Amerclad, the heavy-duty portable cable for every type special job.

896. Pins and Bushings
Ex-Cell-O Corporation. Bulletin 32381 describes standard types and sizes of Ex-Cell-O pins and bushings.

897. Storage Battery
The Electric Storage Battery Co. Complete detailed information offered on the newly improved Exide-Ironclad battery for all railway applications.

898. Met-L-Wood
Met-L-Wood Corporation. Full details offered on Met-L-Wood uses in passenger cars, baggage cars and cabooses.

899. Wheel Truing Carbide Wheel Cutters
Wheel Truing Brake Shoe Co. Full details offered on how to maintain wheels with the Fcc-21 cutters.

900. Diesel Engine Air Grille
Farr Company. Complete details offered on the Dynamic Grille, and other railroad products by Farr.

901. Freight Car Coating
J. W. Mortell Co. Circular on Railway Insulmat, the 3-purpose coating used for interior walls of all types cars.

902. Automobile Rental Service
Hertz Driv-Ur-Self System, Inc. Complete details on the Hertz Rail-Auto Travel Plan providing rail travelers with new cars at train destinations.

903. Gun Iron
Hunt-Spiller Manufacturing Corp. A practical guide for the user of iron and steel castings "Bulletin on Modern Metallurgy"; 24 pages of technical data on many types of metals and alloys.

(Continued first column reverse side)

Additional Product Information

This is a complete list of products mentioned in the advertisements in this issue. For more data on any product shown, circle the page number(s) on the reply cards below, fill in and mail *Note:* If the advertiser mentions more than one product, or if more than one ad appears on the page, *write in* the name of the product you are interested in.

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LITERATURE & PAMPHLETS

904. Rust Preventative
Rust-Oleum Corporation. New catalog describes rust preventative for rolling stock, metal buildings, bridges and signal equipment.

905. Traction Motor Support Bearings
Magnus Metal Corp. subs of National Lead Co. Bulletin #6000 gives complete information on the Magnus "High Mileage" traction motor support bearings for all makes and types of diesel locomotives.

906. Recorders
Barco Manufacturing Company. New bulletin "Barco Recorders for Diesel, Steam and Electric Locomotives in Passenger, Freight and Switching Service."

907. Tie Tamper
Railway Maintenance Corporation. Details available on the applications of The McWilliams Tie Tamper.

908. Batteries
Gould-National Batteries, Inc. Full information on the Gould Plus-Performance Plan showing how to conserve and extend battery power.

909. Refrigerator Car Insulation
American Hair & Felt Co. Complete data on Streamlite Hairinsul all-hair refrigerator car insulation.

910. Radiography
Eastman Kodak Company. Booklet available on this important function of photography—"Radiography as a Foundry Tool."

911. Safety Shoes
Hy-Test Safety Shoes Div. International Shoe Co. Folder available explaining the advantages of Bol Tan sweat-resistant leather insoles.

912. Diesel-Electric Locomotive-Cranes
Industrial Brownhoist Corporation. Complete descriptive data offered on Brownhoist diesel-electric locomotive-cranes.

913. Switch Stands
Ramapo Ajax Div. American Brake Shoe Co. Descriptive literature offered on Racor No. 22 Heavy Duty Automatic Safety Adjustable Switch Stands.

914. Snow Handling Unit
William Bros Boiler & Mfg. Co. Full information on Bros Sno-Meltr dual-purpose units for yard snow handling.

915. Rebuilding Service (Diesel Injection Equipt)
Adeco Products, Inc. Illustrated brochure gives data on Adeco's rebuilding service for diesel fuel injection equipment.

916. Record Handling System
Diebold, Inc. Complete information offered on Diebold's Safe-T-Stak storage files; or, a space-saving survey at no obligation. *Please specify.*

917. Respiratory Protection Items
Willson Products, Inc. Bulletin contains complete data on Willson respirators, Universal gas mask style WUG, chemical cartridge respirator, and the other items in the Willson line of respiratory protection equipment.

918. Rail-Flange Lubricant
Standard Oil Company of California. Free catalog "How to Save Money on Equipment Operation" is full of helpful lubrication data.

919. Glulam Timbers
Timber Structures, Inc. Complete data offered on glulam timbers from Timber Structures in booklet "Engineered Timber Construction."

920. Freight Car Trucks
Chrysler Corporation. Complete information and data available on the new Chrysler Design Freight Car Trucks with self-contained friction snubber.

921. Safety Blower Units
Safety Car Heating & Lighting Company. Additional information offered in "Safety" Blower Unit Bulletin on blower units with air delivery up to 1900 cfm for dining, kitchen and sleeping cars.

922. Air Dump Cars
Differential Steel Car Company. Bulletin RA-5 describes Differential air dump cars that dump in two directions.

923. Chemical Type Wood Preservative
The Dow Chemical Company. Complete technical information offered on penta—the chemical type wood preservative.

924. Welding Equipment
Westinghouse Electric Corporation. Full information on the Westinghouse D-C Rectifier Welder with arc-drive control, and other welding equipment.

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Norfolk & Western Class A locomotive equipped with auxiliary tender hauling a train of 175 empties in the Kenova district

A Report from the N&W on . . .

Increasing Steam Locomotive Productivity

Dynamometer tests with loaded and empty trains, showing the effect of eliminating a water stop, indicate substantial economies in operation

Improved freight-train performance and substantial savings in time have resulted from the Norfolk & Western's use of an auxiliary tender, permitting elimination of a water stop, in steam locomotive service on its Kenova district between Williamson, W. Va., and Portsmouth, Ohio, 112 miles. The data depicting these favorable results were presented in a report to the recent meeting of the Locomotive Maintenance Officers Association at Chicago by C. S. Patton, Jr., general foreman, locomotive department, of the N&W.

The report deals with the results of dynamometer tests made in 1951, measured against tests made in 1943 in the same district. The 1951 tests, made after elimination of the Prichard water stop, were run to determine the resulting saving in time, the possibilities of increasing the tonnage rating, and the net gain in terms of gross ton-miles per train-hour.

The tests were carried out with a regularly assigned locomotive, the road's Class A, 2-6-6-4 type, single-expansion articulated. It was operated by pool crews in their regular turn. To provide ample water capacity for handling the tonnage trains west and the empty coal car trains east with no stop for water, an auxiliary water tender was converted from a 16,000-gallon tender and coupled behind the regular tender.

The study began with initial observations of four round-trips handling the nominal tonnage rating of 13,000 tons with loaded coal cars west (Williamson to Portsmouth) and handling 175 empty coal cars eastbound. At the conclusion of these runs, the tonnage westbound was increased to 14,500 tons. No change was made in the eastbound runs.

Increase Indicated

The preliminary runs indicated the possibility of handling an increase of 1,500 tons over the rated tonnage west. A considerable advantage was evident in gross ton-miles per train-hour with both the 13,000-ton and 14,500-ton runs, chiefly because of time saved by eliminating the water stop.

As result of these preliminary observation runs, a dynamometer road test was conducted to obtain more complete data for comparing the performance when

agent at Knoxville was reported in *Railway Age* August 25.

W. J. Myers has been appointed general agent of the CHICAGO GREAT WESTERN at Winston-Salem, N.C., succeeding **A. C. Collins, Jr.,** who has been transferred to Kansas City, Mo.

The CENTRAL OF GEORGIA and SAVANNAH & ATLANTA will open an office for industrial development assistance at 630 Fifth avenue, New York, on October 1, "to inform industry of the rapidly growing territory in the Southeast served by these two carriers." **Walter R. Brown,** manager of the Albany, Ga., Chamber of Commerce, will be general industrial agent in charge of the office.

Leo F. Walsh, formerly traveling freight and passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed division freight and passenger agent at Great Falls, Mont., succeeding **A. E. Gist,** who has retired.

E. O. Lewis has been appointed acting general baggage, mail and express agent of the SOUTHERN PACIFIC at Houston, succeeding **Sam H. Milby,** who has been assigned temporarily to other duties.

S. J. Sienko, general agent—freight department, of the CHICAGO, BURLINGTON & QUINCY, at Omaha, has been granted temporary leave of absence. **Edward J. Julis** has been appointed acting general agent—freight department at that point.

Edgar D. Zeigler, assistant to general traffic manager of the PENNSYLVANIA, has been appointed foreign freight traffic manager, with headquarters as before at Philadelphia, succeeding **Alfred J. Ball,** whose retirement was noted in *Railway Age* August 18, page 18. **Hobart H. Young,** freight claim agent at Philadelphia, has been advanced to assistant to general traffic manager.

W. C. Hymus, assistant industrial commissioner of the Central region of the CANADIAN NATIONAL at Toronto, has been appointed commissioner of development at Montreal.

F. E. Agan has been appointed general freight and passenger agent of the NEVADA NORTHERN at East Ely, Nev., succeeding **P. T. Hammock,** who retired on September 1.

S. E. Pilson, traveling passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at La Crosse, Wis., has been appointed district passenger agent at that point.

Walter M. Haenssel, assistant freight traffic manager of the BALTIMORE & OHIO at Cincinnati, has been appointed freight traffic manager there, succeeding **Elmer A. Schofield,** who has been named freight traffic manager in charge of rates for the system at Baltimore. Mr. Haenssel was born at St. Louis August 20, 1901, and entered railway service on February 26, 1917, as a messenger in the accounting office of the B&O in his native city. By 1927 he had advanced through a series of clerical positions to become freight representative at St. Louis. Subsequently, he served as a freight traffic officer at Tulsa, Okla., and Kansas City, Mo., returning to St. Louis in 1946 as general freight agent. Mr. Haenssel became assistant freight traffic manager at Cincinnati in April 1951.

Walter M. Haenssel

H. B. Brownell, general freight and passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Butte, Mont., has retired, after having served with the road's traffic department since 1917. He has been succeeded by **Victor E. Straus,** division freight agent at Tacoma, Wash., since 1947. **John H. Agner,** since March 1951 assistant general agent at Seattle, succeeds Mr. Straus at Tacoma, and **Robert W. Bigelow,** former chief clerk to the western traffic manager, succeeds Mr. Agner in Seattle.

Elmer A. Schofield, freight traffic manager of the Baltimore & Ohio at Cincinnati, has been appointed freight traffic manager in charge of rates for the system at Baltimore.

OBITUARY

Howard Brooks, executive general agent of the CHICAGO, ROCK ISLAND & PACIFIC at Fort Worth, Tex., died on September 17 while aboard a Santa Fe passenger train near Belen, N. M.

(Continued from page 18)

Strike Ends Against Wabash, Ann Arbor Ferries

Trans-Lake Michigan carferry service of the Ann Arbor, and service across the Detroit river operated by the Wabash, were resumed on September 21 as the Great Lakes Licensed Officers organization agreed to submit issues in dispute to arbitration. However, as this issue went to press, the independent union was continuing its strike against carferry operations of the Chesapeake & Ohio and the Grand Trunk. The strike had lasted 79 days when Wabash and Ann Arbor services were restored.

A spokesman for the C&O said that company had dismissed some of the striking officers for having left their ships without permission. The union refuses to submit issues in dispute to arbitration until these men are restored to duty without prejudice. The striking officers are members of the ships' engine departments. There are generally four such men assigned to each ship, plus a relief man. The basic dispute is over wages, working rules and demand for a union shop (*Railway Age*, September 15, page 14).

Railroads Gained as Trucks Lost Tonnage in 1st Quarter

Class I intercity truckers transported 4.6 per cent fewer tons of revenue freight in this year's first quarter than in the first three months of 1951. The respective totals were 57.5 million tons and 60.2 million tons.

These figures were given by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment." The decrease, the

(Continued on page 63)

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The preliminary runs indicated the possibility of handling an increase of 1,500 tons over the rated tonnage west. A considerable advantage was evident in gross ton-miles per train-hour with both the 13,000-ton and 14,500-ton runs, chiefly because of time saved by eliminating the water stop.

As result of these preliminary observation runs, a dynamometer road test was conducted to obtain more complete data for comparing the performance when

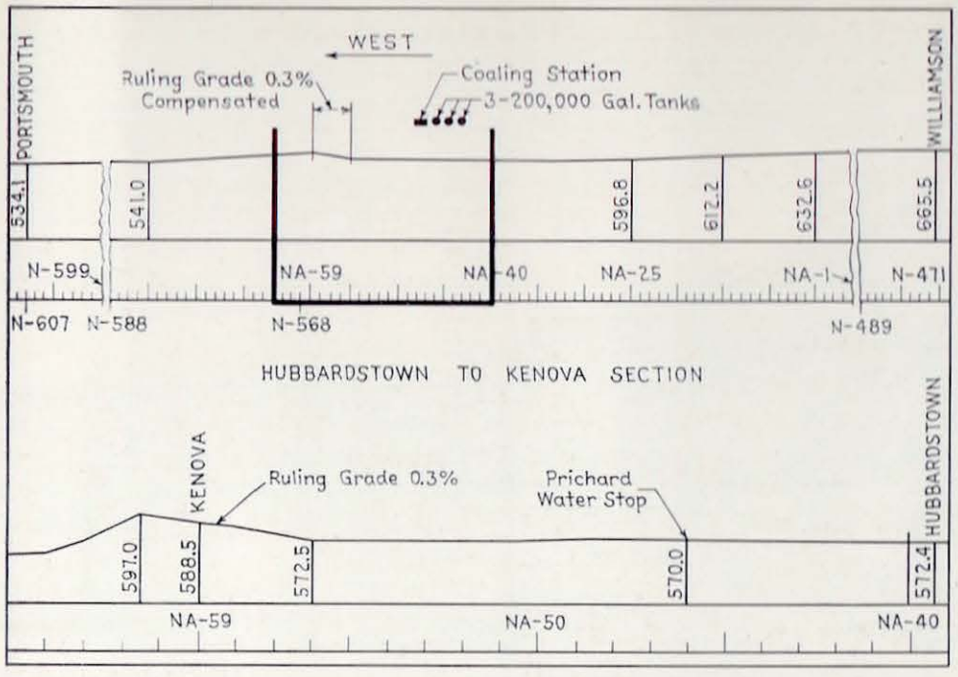


Fig. 1—Track profile between Williamson and Portsmouth.

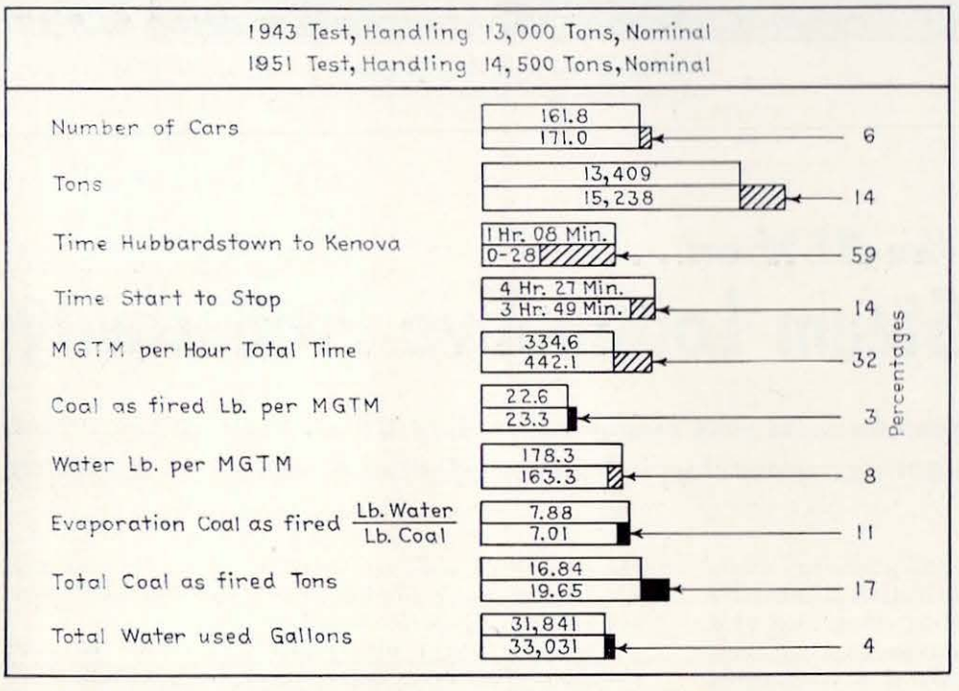


Fig. 2—Comparison of performance between Williamson and Portsmouth —1943 and 1951 tests, handling 13,000 and 14,500 tons respectively.

handling 14,500 tons, without the water stop at Prichard, with the dynamometer tests in 1943 handling 13,000 and 14,000 tons, with a stop for water at Prichard. The 1951 dynamometer test runs were made on round-trip runs handling 14,500 tons westbound and 175 empties east, eliminating the water stop in both directions.

The locomotive used has 70-in. diameter drivers with 300-lb. boiler pressure developing 114,000 lbs. tractive force.

This same class of locomotive was used in the 1943 dynamometer car test. Coupled behind the regular tender is an auxiliary tender converted from a standard 16,000-gallon tender. The tender conversion included closing the coal space; applying metal running boards and metal brake step along with other necessary safety appliances; modifying the air brake system with hand brake; installing standard 4½-in. tank hose and valves at diagonal corners and applying a special tapered shank coupler to the drawbar end and a coupling at each end.

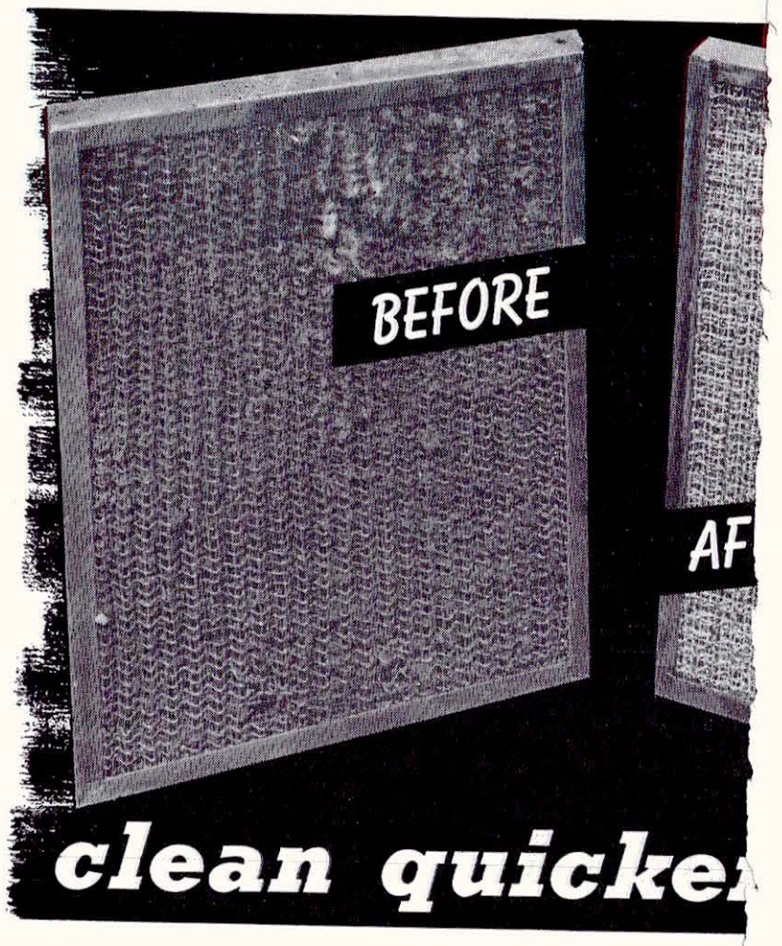
The standard 22,000-gal. tender behind the Class A locomotive was modified for the test by providing a tank hose connection and valve at the rear of tender. The total water capacity of 38,000 gal. and the 30 tons of coal provided ample water and coal for satisfactory operation over the district in either direction without a service stop.

Fig. 1 shows the Kenova District track profile from Williamson to Portsmouth, where the grade is favorable to westbound traffic. The Hubbardstown to Kenova section, which includes the Prichard water stop, is shown enlarged at the bottom of diagram. The location of the water stop, with respect to the westbound ruling grade of 0.3 per cent, is indicated. This grade begins approximately 10 miles west of Prichard. There is also a slight grade of 0.10 per cent in both directions leaving Prichard. By eliminating the scheduled water stop at that point, the reserved drawbar pull, required for starting and in accelerating after the stop, was used to greater operational advantage in maintaining maximum speed with increased tonnage practically over the entire district.

The Prichard water stop was the only service stop required on the district for freight operation, as the coal stop had been discontinued for some time as a result of introducing the long stoker screw and removal of all slides from the tender. This also eliminated the double hauling of considerable coal on tender and cutting of coal down en route.

Fig. 2 shows a performance chart comparing certain selected data from the westbound 1943 test runs made with the water stop, handling 13,000 tons, with the 14,500 ton test runs of 1951 *without* the water stop.

The top half of the bars in the diagram represent the 1943 test and the bottom half the 1951 test for each item. The values for each item are shown on the respec-



with longer lasting Dearborn Hot Tank Diesel cleaners

Here is a versatile cleaner for use in Diesel shops and back shops—it's the Dearborn Heavy Duty Hot Tank Cleaner No. 60. A free-rinsing, powdered cleaner, No. 60 effectively cleans all ferrous (and most non-ferrous) metal parts.

Principal Diesel uses include washing filters—removing carbon, oil and grease from pistons, liners, cylinder heads and engine parts—cleaning greasy trucks and car journals. Dearborn Hot Tank Cleaner No. 62 is used for steam locomotive parts.

No. 60 is economical to use because it is effective over long periods. It is completely soluble, non-volatile and free from objectionable odors. For information on this and the complete line of Dearborn Cleaners, consult with your Dearborn Engineer.

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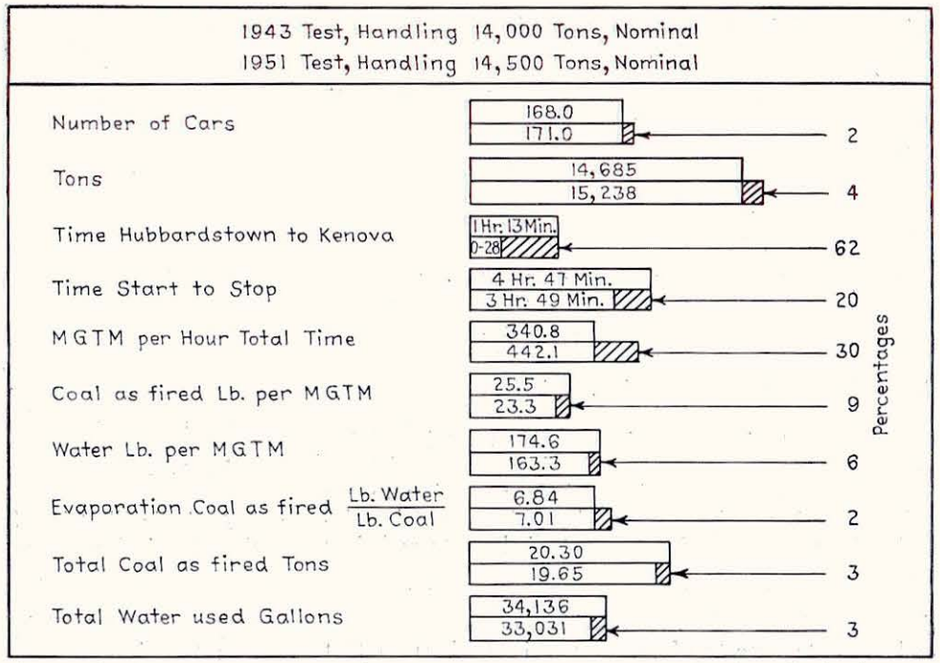
THE LEADER IN WATER TREATMENT AND RUST PREVENT

tive bars. The percentages favorable to the 1951 no-water-stop-test are indicated by the cross-hatched portion and those not favorable are shown by the solid black portion.

For the 1951 test the cars and tonnage indicate increases of 6 per cent and 14 per cent respectively. The time from Hubbardstown to Kenova — the section which includes and is directly affected by the Prichard water stop—shows a reduction of 40 minutes, or a decrease of 59 per cent over the 1943 test. The total time, start to stop, showed a decrease of 14 per cent as a result of no water stop.

The combination of time saved because of no water stop and the increased tonnage handled gave 108 thousand more gross ton-miles per train-hour, or an increase of 32 per cent. The coal used per thousand gross ton-miles was about 3 per cent greater for the 1951 test. A factor causing this increase was the higher rate of work production in 1951, as evidenced by nine per cent higher drawbar horsepower. This required a higher firing rate, which was the principal factor in the 11 per cent decrease in water evaporated per pound of coal as fired. The water used per thousand gross ton-miles was a little over 8 per cent less for the 1951 test. This probably is a reflection of the increase in steam economy because of eliminating the water stop. The totals for coal fired and water used showed a slight increase for the 1951 test.



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This chart indicates that with about the same tonnage in the two tests, the resulting performance is entirely in favor of the 1951 no-water-stop test.

Substantial Time Savings

The average of three runs in the 1943 test shows the standing time at Prichard as 12 min. 2 sec., and the elapsed time between NA-50 and NA-38 (see profile) as 39 min. 5 sec. In the 1951 test there was no standing time at Prichard and the elapsed time (NA-50 to NA-38) was reduced to 17 min. 25 sec., or a time saving of 21 min. 40 sec. These data are from a comparison of the tests eastbound, with 175 empty coal cars. The elimination of the water stop results in a smaller time saving than for loaded westbound trains because stopping and accelerating is much faster with empty trains of less than one-third the tonnage.

The overall time for the westbound 1951 runs is not a representative value for the time saved with no water stop because there were track work delays during the 1951 test. For these runs, however, the operation over the section NA-50 to NA-38 was normal for both test series.

Comparative Summary

The table below is a comparative summary of the 1943 and 1951 tests. The total time saved, start to stop, per round trip with no water stop in either direction was 62 min. The increase in gross ton-miles per train-hour amounted to 31 per cent westbound and 10 per cent eastbound. The small increase in coal per thousand gross ton-miles is due, in part, to the slightly higher speed westbound and operational delays eastbound.

As result of the satisfactory 1951 test performance, authority was given for converting additional tenders to auxiliary water tenders for establishing no-water-stop operation in this district. This conversion program has been completed and the tonnage rating has been increased on the Kenova District from 13,000 tons to 14,500 tons, resulting in materially increased gross ton-miles per train-hour without any material increase in fuel consumption.

Advantages of 1951 Performance with Auxiliary Tender Handling 14,500 Tons over the 1943 Performance with the Water Stop, Handling 13,000 Tons

	Westbound	Eastbound
Time, start to stop, min. less	40	22
Gross ton-miles per train-hour, per cent more	31	10
Coal per 1,000 gross ton-miles, per cent more	3	2

office of vice-president—traffic, has been appointed assistant freight claim agent.

C. T. Lannon has been appointed assistant treasurer of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Chicago, succeeding the late **W. W. Beckman.**

James C. Kenady has been appointed right of way, land and tax commissioner of the GREAT NORTHERN at St. Paul, succeeding the late **John Garing.** Mr. Kenady joined the GN as general tax agent at St. Paul in 1946, and since 1950 has been assistant right of way, land and tax commissioner.

Parker Brownell, attorney of the BOSTON & MAINE, has been appointed general attorney at Boston, succeeding **John B. Sawyer,** who has retired after 35 years of service. **Neal J. Holland,** attorney, has been appointed commerce counsel.

Charles H. O'Hearn, auditor of capital expenditures, has been promoted to assistant general auditor of the CHICAGO & NORTH WESTERN. **Bernard Firestone,** assistant auditor of capital expenditures, succeeds Mr. O'Hearn. Both will continue to have headquarters in Chicago.

Mr. O'Hearn entered railway service in 1920 as a clerk in the accounting department of the subsidiary Chicago, St. Paul, Minneapolis & Omaha at St. Paul. In November 1938 he became auditor of disbursements at that point. He went to Chicago in 1947 as auditor of capital expenditures for the C&NW system.

Mr. Firestone joined the North Western in 1939 as a tapeman on the Ashland division. He became construction accountant at Chicago in February 1943. After serving in a number of accounting capacities, he became assistant auditor of capital expenditures in April 1951.

OPERATING

Andrew W. Kometz has been named to the newly created position of assistant to superintendent of transportation of the CANADIAN PACIFIC at Calgary, Alta., to coordinate use of diesel motive power on the Prairie and Pacific regions.

W. B. Kennedy has been appointed trainmaster of the Shreveport, La., district and Vicksburg, Miss., yard, of the ILLINOIS CENTRAL at Vicksburg. He succeeds **Carl Boyd,** who has been assigned to other duties at his own request.

A. C. Kohlhase, superintendent of the Rocky Mountain division of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Butte, Mont., retired on October 1, after serving with the road since 1910. He has been succeeded by **James T. Hayes,** superintendent of the Trans-Missouri division at Miles City, Mont. Mr. Hayes has been succeeded by **James D. Shea** superintendent at Perry, Io **McGinn,** assistant superint Savanna Ill., has been tran Perry, succeeding Mr. She **Devlin** has been transferre Crosse, Wis., to Savanna t Mr. McGinn; **W. T. Hjor** master at Marion, Iowa, has pointed assistant superintend Crosse to succeed Mr. Devli **J. Klein,** trainmaster at Mi has been transferred to Mari **Valentine,** transportation a the general manager at Ch been appointed trainmaster apolis to succeed Mr. Klein

Ralph E. Wright, assista superintendent of the NEW TARIO & WESTERN, has been general superintendent, with ters as before at Middleto succeeding **Fred Hawk,** w tired at his own request, afte of service. The position of general superintendent has ished. Mr. Hawk was bor Branch, Delaware county, N. tember 9, 1881, and entere service on October 24, 1899 man on the NYO&W. He su served as conductor, inspecto portation, trainmaster and as perintendent. Mr. Hawk was superintendent on August 1, became general superintende tober 1, 1941.

Mr. Wright was born at N.Y., on March 1, 1891, an railroad service with the N 1907 as a helper at Rock I subsequently serving as teleg various stations and agent Jervis, N. Y. He was appoint

Ralph E. Wright

freight agent at Middletown i ber 1938, assistant genera agent on January 2, 1941, an freight agent on July 1, Wright has been assistant superintendent for the past t

John L. Hayes, passeng master on the Pittsburgh d the PENNSYLVANIA at Pittsb

agent at Knoxville was reported in *Railway Age* August 25.

W. J. Myers has been appointed general agent of the CHICAGO GREAT WESTERN at Winston-Salem, N.C., succeeding **A. C. Collins, Jr.,** who has been transferred to Kansas City, Mo.

The CENTRAL OF GEORGIA and SAVANNAH & ATLANTA will open an office for industrial development assistance at 630 Fifth avenue, New York, on October 1, "to inform industry of the rapidly growing territory in the Southeast served by these two carriers." **Walter R. Brown,** manager of the Albany, Ga., Chamber of Commerce, will be general industrial agent in charge of the office.

Leo F. Walsh, formerly traveling freight and passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed division freight and passenger agent at Great Falls, Mont., succeeding **A. E. Gist,** who has retired.

E. O. Lewis has been appointed acting general baggage, mail and express agent of the SOUTHERN PACIFIC at Houston, succeeding **Sam H. Milby,** who has been assigned temporarily to other duties.

S. J. Sienko, general agent—freight department, of the CHICAGO, BURLINGTON & QUINCY, at Omaha, has been granted temporary leave of absence. **Edward J. Julis** has been appointed acting general agent—freight department at that point.

Edgar D. Zeigler, assistant to general traffic manager of the PENNSYLVANIA, has been appointed foreign freight traffic manager, with headquarters as before at Philadelphia, succeeding **Alfred J. Ball,** whose retirement was noted in *Railway Age* August 18.

Elmer A. Schofield, freight traffic manager of the Baltimore & Ohio at Cincinnati, has been appointed freight traffic manager in charge of rates for the system at Baltimore.

page 18. **Hobart H. Young,** freight claim agent at Philadelphia, has been advanced to assistant to general traffic manager.

W. C. Hymus, assistant industrial commissioner of the Central region of the CANADIAN NATIONAL at Toronto, has been appointed commissioner of development at Montreal.

F. E. Agan has been appointed general freight and passenger agent of the NEVADA NORTHERN at East Ely, Nev., succeeding **P. T. Hammock,** who retired on September 1.

S. E. Pilson, traveling passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at La Crosse, Wis., has been appointed district passenger agent at that point.

Walter M. Haenssel, assistant freight traffic manager of the BALTIMORE & OHIO at Cincinnati, has been appointed freight traffic manager there, succeeding **Elmer A. Schofield,** who has been named freight traffic manager in charge of rates for the system at Baltimore. Mr. Haenssel was born at St. Louis August 20, 1901, and entered railway service on February

Walter M. Haenssel

26, 1917, as a messenger in the accounting office of the B&O in his native city. By 1927 he had advanced through a series of clerical positions to become freight representative at St. Louis. Subsequently, he served as a freight traffic officer at Tulsa, Okla., and Kansas City, Mo., returning to St. Louis in 1946 as general freight agent. Mr. Haenssel became assistant freight traffic manager at Cincinnati in April 1951.

H. B. Brownell, general freight and passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Butte, Mont., has retired, after having served with the road's traffic department since 1917. He has been succeeded by **Victor E. Straus,** division freight agent at Tacoma, Wash., since 1947. **John H. Agner,** since March 1951 assistant general agent at Seattle, succeeds Mr. Straus at Tacoma, and **Robert W. Bigelow,** former chief clerk to the western traffic manager, succeeds Mr. Agner in Seattle.

OBITUARY

Howard Brooks, executive general agent of the CHICAGO, ROCK ISLAND & PACIFIC at Fort Worth, Tex., died on September 17 while aboard a Santa Fe passenger train near Belen, N. M.

(Continued from page 18)

Strike Ends Against Wabash, Ann Arbor Ferries

Trans-Lake Michigan carferry service of the Ann Arbor, and service across the Detroit river operated by the Wabash, were resumed on September 21 as the Great Lakes Licensed Officers organization agreed to submit issues in dispute to arbitration. However, as this issue went to press, the independent union was continuing its strike against carferry operations of the Chesapeake & Ohio and the Grand Trunk. The strike had lasted 79 days when Wabash and Ann Arbor services were restored.

A spokesman for the C&O said that company had dismissed some of the striking officers for having left their ships without permission. The union refuses to submit issues in dispute to arbitration until these men are restored to duty without prejudice. The striking officers are members of the ships' engine departments. There are generally four such men assigned to each ship, plus a relief man. The basic dispute is over wages, working rules and demand for a union shop (*Railway Age*, September 15, page 14).

Railroads Gained as Trucks Lost Tonnage in 1st Quarter

Class I intercity truckers transported 4.6 per cent fewer tons of revenue freight in this year's first quarter than in the first three months of 1951. The respective totals were 57.5 million tons and 60.2 million tons.

These figures were given by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment." The decrease, the

(Continued on page 63)

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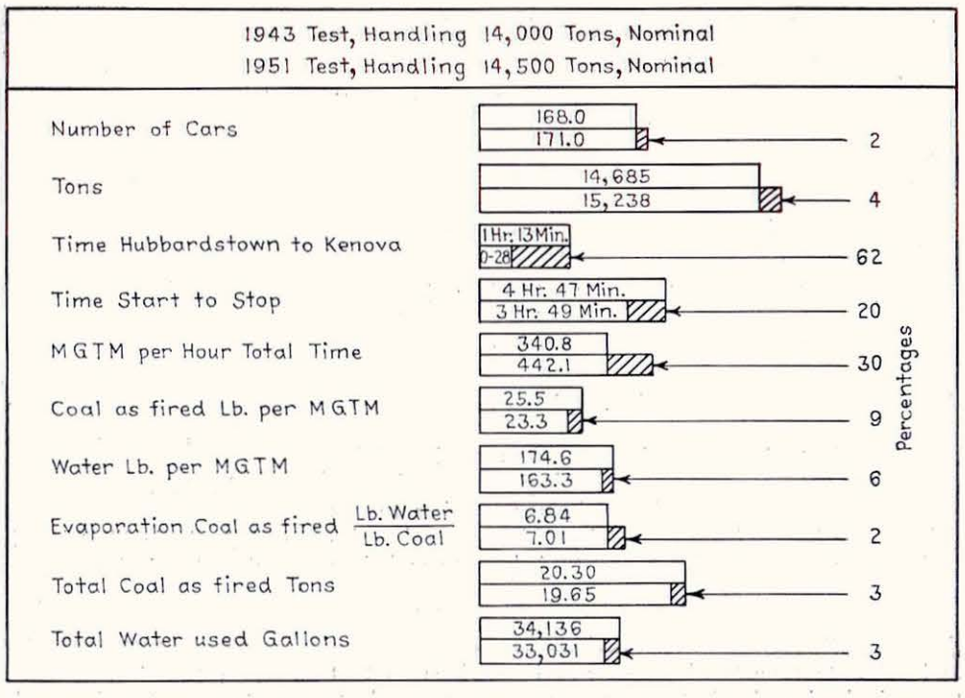

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MECHANICAL ASSOCIATIONS

(Continued from page 43)

alert and interested than the heads of departments." Sound employee and public relations, he said, evolve from an accumulation of "the little things we do from day to day. . . . They are the things which make us good or poor leaders . . . and which play such an important part in shaping of good or bad public and employee relations."

R. P. Hamilton, superintendent of safety, St. Louis-San Francisco, spoke on supervisors' responsibility for safety. He said that most men work for the boss, not for the company, and that loyalty works from the top down through the organization. It is necessary that the supervisor be enthused with the subject of safety if he is effectively to influence his men. He must be willing to study to make himself a good safety leader and to be able to teach. He must live strictly according to the safety rules if he wishes to convince his men of his sincerity. He must teach. If he has studied safety and lives it, he will not find teaching difficult.

Director E. H. Davidson of the Bureau of Locomotive Inspection emphasized the importance of complete and accurate reports of locomotive inspections so that they will be intelligible to shop men. He also called attention to the many instances where investigations of reportable accidents have disclosed that defects responsible for the accidents had been reported several times prior to the accident. He stressed the need for attention to the manner in which defective conditions are shown on daily reports and to the corrective procedure employed by maintenance forces.

The reports and papers dealt largely with the various aspects of diesel-electric locomotive operation. Improper handling of the locomotive was the subject of a report by a committee of which R. R. Rich, road foreman of equipment of the Rock Island, was chairman. Another was on diesel failures which cause train delays. This was prepared by a committee of which T. J. Conway, fuel supervisor of the T&P, was chairman. A paper on the responsibility of the engineman for the prevention of loss and damage and personal injuries due to rough handling was presented by W. T. Rice, general superintendent, Richmond, Fredericksburg & Potomac. This paper applied both to steam and diesel operation.

Four items on the program were on the education of employees in various aspects of diesel locomotives. The education of road supervisors and engine crews was discussed by F. M. Roberts, road foreman of engines, St. Louis Southwestern. Operating instructions and trouble shooting for Vapor-Clarkson and Elesco steam generators was the topic of a paper by T. V. Methe, road foreman of engines, New York Central. A. A. Mickolaitis, training instructor, Electro-Motive Division, General Motors Corporation, traced through the wiring diagrams of the seven basic electrical circuits of the Model F-7 locomotive, and R. L. Henderson, Transportation Division, General Electric Company, described the Alco-G.E. excitation system. Safety precautions on diesel engines was the subject of a committee report presented by R. D. Nicholson, road foreman of engines of the New Haven.

Louis E. Talbot, of the T&P testing laboratory, explained and evaluated the various specification tests for diesel fuel. B. W. DeGeer, engineer water service and fuel facilities, Great Northern, spoke on water treatment both for steam and diesel locomotives.

Two program items covered steam locomotive operation. A report on Railroad Management's Viewpoint on Smoke Abatement was presented by M. G. Stewart, road foreman of engines, Washington Terminal. C. R. Patterson, regional locomotive fuel supervisor, Canadian National, discussed the factors affecting the availability and efficiency of the steam locomotive.

The following officers were elected for the ensuing year: President, R. D. Nicholson, road foreman of engines, of the New Haven. Vice-presidents: W. H. Fortney, chief road foreman of engines, New York Central; E. L. Reeves, trainmaster, Baltimore & Ohio Chicago Terminal; and T. J. Conway, fuel supervisor T&P. Secretary-treasurer: L. H. Peters. Elected to the Executive Committee were: O. D. Teeter, fuel supervisor, D&RGW; C. M. Moddrell, supervisor fuel and locomotive performance, Northern Pacific; and J. R. Weller, supervisor locomotive operation, B&O.

Electrical Section

A single Electrical Section of the A.A.R. now serves the electrical requirements of the mechanical and engineering departments of the railroads. It held its annual meeting at the Hotel Sherman, Chicago, September 15-17, with a daily attendance of 250 to 300. Thirteen technical reports were presented, and the discussions which followed them presented a problem to Chairman H. F. Finnemore, chief electrical engineer of the Canadian National, in holding the sessions within the allotted time. All of the reports have been compiled in a single volume by the section's full-time secretary S. W. Marras.

In addition to the reports, a special paper on the New Orleans Union Passenger Terminal was presented jointly by C. J. Wallace, manager of the terminal, and J. M. Trissal, assistant chief engineer, Illinois Central. This development will replace five passenger terminals.

Technical features of the terminal were described by Mr. Trissal. Many of them are exceptional, since the situation permitted designing the terminal without the usual restrictions of location of facilities, platform widths, and existing operating requirements. The talks were illustrated with color slides showing the present status of construction work and drawings of the terminal and track layout.

Chairman Finnemore said that with the advent of the diesel, which is at least 50 per cent electrical, and with air conditioning and a multitude of other new applications of electrical equipment, there is a great need on the railroads for many technically trained men.

Reports dealt with power supply, prevention of corrosion, wire and cable, electrolysis, electric heating, radio and communication systems on rolling stock, illumination, wiring diagrams for rolling stock, car electrical equipment, welding and cutting, car air-conditioning equipment, repair shop facilities and electric rolling stock. The latter subject was explored on September 17, in a joint meeting of the Electrical Section with the Locomotive Maintenance Officers Association. Also, at this meeting, Secretary Marras announced that the next annual meeting of the Electrical Section would be held in June 1953 in Atlantic City, N. J., in conjunction with the annual meeting of the Mechanical Division, A.A.R., June 24, 25, and 26.

The Railway Electric Supply Manufacturers Association held an exhibit at the Hotel Sherman. There were 39 exhibitors, and the exhibits were exceptional in the large number of new developments and the animated exhibits included to illustrate the quality of products. During the time allotted for inspection of exhibits, the aisles between the booths were crowded to capacity.

FINANCIAL

(Continued from page 20)

Investment Publications

[The surveys listed herein are for the most part prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information. *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Business Week, McGraw-Hill Publishing Company, 330 W. 42nd st., New York 36. Single copies, 25 cents.

Rail Debt is Rising Again . . . Because the Lines are Borrowing to Buy New Equipment; But This New Borrowing Hasn't Been Costly . . . and the New Equipment Has Greatly Reduced the Percentage of Revenue Absorbed by "Transportation Expenses" . . . But It Can Mean Trouble Later. Business Week, September 13, 1952, pp. 136-140.

Baker, Weeks & Harden, One Wall st., New York 5.

Chicago & Eastern Illinois Railroad. August 21.

Class I Railroads, Trends of Earnings, Price, Estimated Dividends and Yields. Monthly Review.

Rail Stocks Still Realistically Priced at New Highs. Excerpts from Moody's Stock Survey, August 11, 1952.

New Securities

Application has been filed with the I.C.C. by:

ST. LOUIS, BROWNSVILLE & MEXICO.—To assume liability for $2,450,000 of series EE equipment trust certificates, to finance in part 500 steel box cars costing an estimated $3,100,000. The cars will cost approximately $6,200 each and will be built in Missouri Pacific shops at DeSoto, Mo. The certificates would be dated October 15, and would mature in 10 annual installments of $245,000 each, beginning October 15, 1953. They would be sold by competitive bidding, with the interest rate to be set by such bids.

Division 4 of the I.C.C. has **authorized:**

ALLEGHANY CORPORATION.—To issue two promissory notes aggregating $8,200,000, proceeds of which will be used to prepay indebtedness of $7,000,000 to the Manufacturers Trust Company of New York, and $1,200,000 to the First National Bank of Boston. The new notes will be payable three years after date of issue. They will be secured by various stocks owned by Alleghany, the value of which must equal 150 per cent of the unpaid principal balance of the notes. The new notes will go to the First National Bank of Boston ($7,200,000) and to the Empire Trust Company ($1,000,000).

ERIE.—To assume liability for $2,880,000 of equipment trust certificates to finance in part 24 diesel locomotive units costing an estimated $3,600,000 (*Railway Age*, September 8, page 57). Division 4 approved sale of the certificates for 99.031 with interest at 2⅞ per cent—the bid of Halsey, Stuart & Co. and five associates—which will make the average annual cost of the proceeds to the road approximately 3.09 per cent. The certificates, dated September 15, will mature in 20 semiannual installments of $144,000 each, beginning March 15, 1953. They were reoffered to the public at prices yielding from 2.15 to 3.15 per cent, according to maturity.

GULF, MOBILE & OHIO.—To assume liability for $4,992,000 of series E equipment trust certificates to finance in part the acquisition of three diesel-electric locomotives and 1,237 freight cars at an estimated total cost of $7,403,050. (*Railway Age*, September 1, page 25.) Division 4 approved sale of the certificates at 99.26, with interest at three per cent—the bid of Salomon Bros. & Hutzler and three associates, which will make the average annual cost of the proceeds to the road approximately 3.13 per cent. The certificates, dated October 1, will mature in 26 semi-annual installments of $192,000 each, beginning April 1, 1953. They were reoffered to the public at prices yielding from 2.15 to 3.15 per cent, according to maturity.

TENNESSEE CENTRAL.—To issue promissory notes totaling $622,800 to the Reconstruction Finance Corporation. Proceeds will be used to construct a 5.6-mile branch line in Putnam county, Tenn. The notes will be payable on or before 18 years from date of issue, and interest will be at 5 per cent.

Dividends Declared

AKRON, CANTON & YOUNGSTOWN.—$3, payable October 1 ot holders of record September 15.

BELT RR & STOCK YARDS.—common, 50¢; 6% preferred, 75¢ quarterly, both payable October 1 to holders of record September 20.

CHICAGO, ROCK ISLAND & PACIFIC.—preferred, $1.25, payable September 30 to holders of record September 12.

NORTHERN PACIFIC.—75¢, quarterly, payable October 25 to holders of record October 3.

RICHMOND, FREDERICKSBURG & POTOMAC.—common, 50¢; extra 50¢, both payable October 1 to holders of record September 19.

TEXAS & PACIFIC.—common, $1.25, quarterly; 5% preferred, $1.25, quarterly, both payable September 30 to holders of record September 25.

WHEELING & LAKE ERIE.—common, $1.43¾; 4% prior lien, $1, quarterly, both payable November 1 to holders of record October 17.

Security Price Averages

	Sept. 23	Prev. Week	Last Year
Average price of 20 representative railway stocks	63.62	61.68	56.48
Average price of 20 representative railway bonds	92.44	92.78	93.86

RAILWAY OFFICERS

EXECUTIVE

Dean H. Eastman, assistant vice-president of the NORTHERN PACIFIC at Seattle, has been appointed vice-president. Mr. Eastman will remain at Seattle in his new capacity and will continue also to serve as western counsel for the road. Mr. Eastman was first associated with the NP in January

Dean H. Eastman

1936, when he joined its west coast law staff. The following year he was promoted to assistant western counsel and in 1948 was advanced to western counsel. On January 1, 1950, he was appointed assistant vice-president. Prior to joining the NP, he had engaged in private law practice. He is a graduate of the University of Nebraska law school.

William J. Whalen, general manager, Lines East, of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed assistant vice-president in charge of operations, with headquarters as before at Chicago. Mr. Whalen entered railroad service with the Milwaukee as a water boy with a track gang. He later became timekeeper, assistant foreman, foreman on maintenance of way and construction gangs, and, in 1916, roadmaster. In 1923 he became trainmaster and roadmaster on

William J. Whalen

the subsidiary Chicago, Milwaukee & Gary at Joliet, Ill., and later served as trainmaster at various points. His next post was at Perry, Iowa, where he became assistant superintendent in September 1934. In February 1937 he was named superintendent at Terre Haute, Ind., subsequently holding the same position at Savanna, Ill., and La Crosse, Wis. He became general superintendent of the Middle district at Milwaukee, in June 1946; in November 1948 was named assistant general manager at Chicago, and in September 1950 was further promoted to general manager—Lines East at that point.

Alex Lyle has been appointed assistant vice-president of the CANADIAN PACIFIC, with headquarters at Montreal. Mr. Lyle was formerly assistant to the vice-president.

A. E. Greco, manager of public relations of the PULLMAN COMPANY, at Chicago, has been appointed assistant to vice-president—traffic.

FINANCIAL, LEGAL & ACCOUNTING

James Gurley has been appointed insurance and tax agent of the NORFOLK SOUTHERN at Norfolk, Va.

Harry A. Sides, assistant freight claim agent of the PENNSYLVANIA, has been appointed freight claim agent, with headquarters as before at Philadelphia, succeeding **Hobart H. Young,** who has been advanced to assistant to general traffic manager. **William D. Hamilton,** chief clerk in the

office of vice-president—traffic, has been appointed assistant freight claim agent.

C. T. Lannon has been appointed assistant treasurer of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Chicago, succeeding the late **W. W. Beckman.**

James C. Kenady has been appointed right of way, land and tax commissioner of the GREAT NORTHERN at St. Paul, succeeding the late **John Garing.** Mr. Kenady joined the GN as general tax agent at St. Paul in 1946, and since 1950 has been assistant right of way, land and tax commissioner.

Parker Brownell, attorney of the BOSTON & MAINE, has been appointed general attorney at Boston, succeeding **John B. Sawyer,** who has retired after 35 years of service. **Neal J. Holland,** attorney, has been appointed commerce counsel.

Charles H. O'Hearn, auditor of capital expenditures, has been promoted to assistant general auditor of the CHICAGO & NORTH WESTERN. **Bernard Firestone,** assistant auditor of capital expenditures, succeeds Mr. O'Hearn. Both will continue to have headquarters in Chicago.

Mr. O'Hearn entered railway service in 1920 as a clerk in the accounting department of the subsidiary Chicago, St. Paul, Minneapolis & Omaha at St. Paul. In November 1938 he became auditor of disbursements at that point. He went to Chicago in 1947 as auditor of capital expenditures for the C&NW system.

Mr. Firestone joined the North Western in 1939 as a tapeman on the Ashland division. He became construction accountant at Chicago in February 1943. After serving in a number of accounting capacities, he became assistant auditor of capital expenditures in April 1951.

OPERATING

Andrew W. Kometz has been named to the newly created position of assistant to superintendent of transportation of the CANADIAN PACIFIC at Calgary, Alta., to coordinate use of diesel motive power on the Prairie and Pacific regions.

W. B. Kennedy has been appointed trainmaster of the Shreveport, La., district and Vicksburg, Miss., yard, of the ILLINOIS CENTRAL at Vicksburg. He succeeds **Carl Boyd,** who has been assigned to other duties at his own request.

A. C. Kohlhase, superintendent of the Rocky Mountain division of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Butte, Mont., retired on October 1, after serving with the road since 1910. He has been succeeded by **James T. Hayes,** superintendent of the Trans-Missouri division at Miles City, Mont. Mr. Hayes has been succeeded by **James D. Shea,** assistant superintendent at Perry, Iowa. **F. G. McGinn,** assistant superintendent at Savanna Ill., has been transferred to Perry, succeeding Mr. Shea; **F. E. Devlin** has been transferred from La Crosse, Wis., to Savanna to succeed Mr. McGinn; **W. T. Hjorth,** trainmaster at Marion, Iowa, has been appointed assistant superintendent at La Crosse to succeed Mr. Devlin, and **N. J. Klein,** trainmaster at Minneapolis, has been transferred to Marion. **D. P. Valentine,** transportation assistant to the general manager at Chicago, has been appointed trainmaster at Minneapolis to succeed Mr. Klein.

Ralph E. Wright, assistant general superintendent of the NEW YORK, ONTARIO & WESTERN, has been appointed general superintendent, with headquarters as before at Middletown, N.Y., succeeding **Fred Hawk,** who has retired at his own request, after 53 years of service. The position of assistant general superintendent has been abolished. Mr. Hawk was born at East Branch, Delaware county, N.Y., on September 9, 1881, and entered railroad service on October 24, 1899, as trainman on the NYO&W. He subsequently served as conductor, inspector of transportation, trainmaster and assistant superintendent. Mr. Hawk was appointed superintendent on August 1, 1936, and became general superintendent on October 1, 1941.

Mr. Wright was born at Fallsburg, N.Y., on March 1, 1891, and entered railroad service with the NYO&W in 1907 as a helper at Rock Rift, N.Y., subsequently serving as telegrapher at various stations and agent at Port Jervis, N. Y. He was appointed district

Ralph E. Wright

freight agent at Middletown in December 1938, assistant general freight agent on January 2, 1941, and general freight agent on July 1, 1942. Mr. Wright has been assistant general superintendent for the past two years.

John L. Hayes, passenger trainmaster on the Pittsburgh division of the PENNSYLVANIA at Pittsburgh has been promoted to assistant superintendent of the New York division, where he will serve on the staff of **Park M. Roeper,** superintendent, at Pennsylvania Station, New York. **Herman Flait,** station master at Pennsylvania Station, succeeds Mr. Hayes as passenger trainmaster at Pittsburgh. **John E. Buckwalter,** night station master, has been appointed station master and **George B. Keegan** has been named night station master.

John J. O'Toole, assistant general manager, Eastern Lines, of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed general manager Eastern Lines, with headquarters as before at Chicago. He succeeds **William J. Whalen,** who has been appointed assistant vice-president in charge of operations. Mr. O'Toole joined the Milwaukee in 1912, and after serving in minor capacities at various points be-

John J. O'Toole

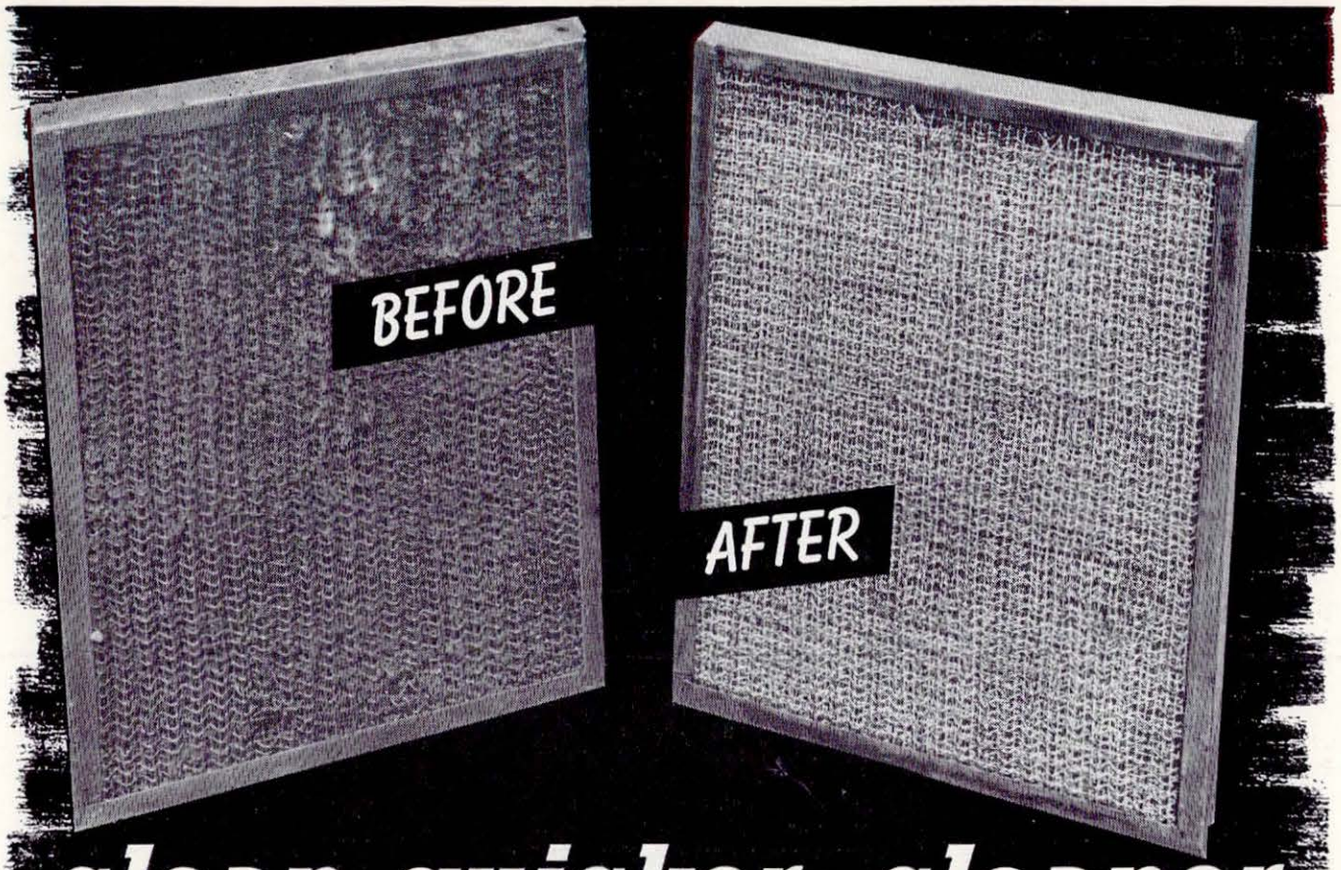
came trainmaster at Minneapolis in December 1936. He later served as assistant division superintendent at Wausau, Wis., and then at Milwaukee. He was appointed superintendent of the Twin City Terminals division at Minneapolis in January 1946. In July of the following year he moved to Chicago as general superintendent of terminals, continuing in that capacity until September 1950, when he was named assistant general manager, Lines East.

TRAFFIC

D. B. Powell has been appointed general agent of the ILLINOIS TERMINAL at San Francisco.

W. F. Mayhall, commercial agent of the NORFOLK SOUTHERN at Norfolk, Va., has been appointed general agent at Cincinnati, succeeding **J. F. Flynn,** deceased.

Robert S. Geer, secretary to the president of the SOUTHERN system at Washington, D.C., has been appointed district freight agent at Knoxville, Tenn., succeeding **John H. Winstead,** whose promotion to division freight



clean quicker, cleaner

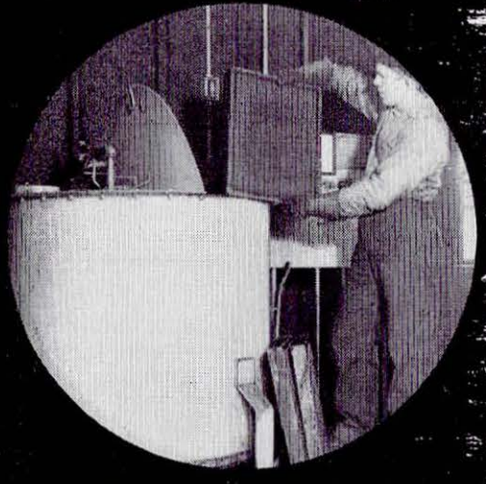
with longer lasting Dearborn Hot Tank Diesel cleaners

Here is a versatile cleaner for use in Diesel shops and back shops—it's the Dearborn Heavy Duty Hot Tank Cleaner No. 60. A free-rinsing, powdered cleaner, No. 60 effectively cleans all ferrous (and most non-ferrous) metal parts.

Principal Diesel uses include washing filters—removing carbon, oil and grease from pistons, liners, cylinder heads and engine parts—cleaning greasy trucks and car journals. Dearborn Hot Tank Cleaner No. 62 is used for steam locomotive parts.

No. 60 is economical to use because it is effective over long periods. It is completely soluble, non-volatile and free from objectionable odors. For information on this and the complete line of Dearborn Cleaners, consult with your Dearborn Engineer.

DEARBORN CHEMICAL COMPANY
Merchandise Mart Plaza • Chicago 54, Illinois



180°F. is the recommended solution temperature for Dearborn Heavy Duty Hot Tank Cleaner No. 60. It may be used in a still tank, cleaning machine, or sprayed on.

SEND FOR INFORMATION

Dearborn Chemical Company, Dept. RA
Merchandise Mart Plaza, Chicago 54, Ill.

☐ Send information on Dearborn Heavy Duty Hot Tank Cleaner No. 60.

☐ Have a Dearborn Engineer call.

*Name*_____

*Position*_____

*Railroad*_____

*Address*_____

*City*_____ *Zone*_____ *State*_____

Dearborn
TRADE MARK REGISTERED
THE LEADER IN WATER TREATMENT AND RUST PREVENTIVES

agent at Knoxville was reported in *Railway Age* August 25.

W. J. Myers has been appointed general agent of the CHICAGO GREAT WESTERN at Winston-Salem, N.C., succeeding **A. C. Collins, Jr.,** who has been transferred to Kansas City, Mo.

The CENTRAL OF GEORGIA and SAVANNAH & ATLANTA will open an office for industrial development assistance at 630 Fifth avenue, New York, on October 1, "to inform industry of the rapidly growing territory in the Southeast served by these two carriers." **Walter R. Brown,** manager of the Albany, Ga., Chamber of Commerce, will be general industrial agent in charge of the office.

Leo F. Walsh, formerly traveling freight and passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed division freight and passenger agent at Great Falls, Mont., succeeding **A. E. Gist,** who has retired.

E. O. Lewis has been appointed acting general baggage, mail and express agent of the SOUTHERN PACIFIC at Houston, succeeding **Sam H. Milby,** who has been assigned temporarily to other duties.

S. J. Sienko, general agent—freight department, of the CHICAGO, BURLINGTON & QUINCY, at Omaha, has been granted temporary leave of absence. **Edward J. Julis** has been appointed acting general agent—freight department at that point.

Edgar D. Zeigler, assistant to general traffic manager of the PENNSYLVANIA, has been appointed foreign freight traffic manager, with headquarters as before at Philadelphia, succeeding **Alfred J. Ball,** whose retirement was noted in *Railway Age* August 18, page 18. **Hobart H. Young,** freight claim agent at Philadelphia, has been advanced to assistant to general traffic manager.

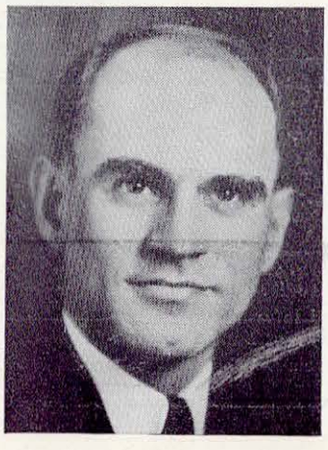
W. C. Hymus, assistant industrial commissioner of the Central region of the CANADIAN NATIONAL at Toronto, has been appointed commissioner of development at Montreal.

F. E. Agan has been appointed general freight and passenger agent of the NEVADA NORTHERN at East Ely, Nev., succeeding **P. T. Hammock,** who retired on September 1.

S. E. Pilson, traveling passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at La Crosse, Wis., has been appointed district passenger agent at that point.

Walter M. Haenssel, assistant freight traffic manager of the BALTIMORE & OHIO at Cincinnati, has been appointed freight traffic manager there, succeeding **Elmer A. Schofield,** who has been named freight traffic manager in charge of rates for the system at Baltimore. Mr. Haenssel was born at St. Louis August 20, 1901, and entered railway service on February 26, 1917, as a messenger in the accounting office of the B&O in his native city. By 1927 he had advanced through a series of clerical positions to become freight representative at St. Louis. Subsequently, he served as a freight traffic officer at Tulsa, Okla., and Kansas City, Mo., returning to St. Louis in 1946 as general freight agent. Mr. Haenssel became assistant freight traffic manager at Cincinnati in April 1951.

Walter M. Haenssel



Elmer A. Schofield, freight traffic manager of the Baltimore & Ohio at Cincinnati, has been appointed freight traffic manager in charge of rates for the system at Baltimore.

H. B. Brownell, general freight and passenger agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Butte, Mont., has retired, after having served with the road's traffic department since 1917. He has been succeeded by **Victor E. Straus,** division freight agent at Tacoma, Wash., since 1947. **John H. Agner,** since March 1951 assistant general agent at Seattle, succeeds Mr. Straus at Tacoma, and **Robert W. Bigelow,** former chief clerk to the western traffic manager, succeeds Mr. Agner in Seattle.

OBITUARY

Howard Brooks, executive general agent of the CHICAGO, ROCK ISLAND & PACIFIC at Fort Worth, Tex., died on September 17 while aboard a Santa Fe passenger train near Belen, N. M.

(Continued from page 18)

Strike Ends Against Wabash, Ann Arbor Ferries

Trans-Lake Michigan carferry service of the Ann Arbor, and service across the Detroit river operated by the Wabash, were resumed on September 21 as the Great Lakes Licensed Officers organization agreed to submit issues in dispute to arbitration. However, as this issue went to press, the independent union was continuing its strike against carferry operations of the Chesapeake & Ohio and the Grand Trunk. The strike had lasted 79 days when Wabash and Ann Arbor services were restored.

A spokesman for the C&O said that company had dismissed some of the striking officers for having left their ships without permission. The union refuses to submit issues in dispute to arbitration until these men are restored to duty without prejudice. The striking officers are members of the ships' engine departments. There are generally four such men assigned to each ship, plus a relief man. The basic dispute is over wages, working rules and demand for a union shop (*Railway Age*, September 15, page 14).

Railroads Gained as Trucks Lost Tonnage in 1st Quarter

Class I intercity truckers transported 4.6 per cent fewer tons of revenue freight in this year's first quarter than in the first three months of 1951. The respective totals were 57.5 million tons and 60.2 million tons.

These figures were given by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment." The decrease, the

(Continued on page 63)

COAST Santa Fe LINES

THE ATCHISON, TOPEKA AND SANTA FE

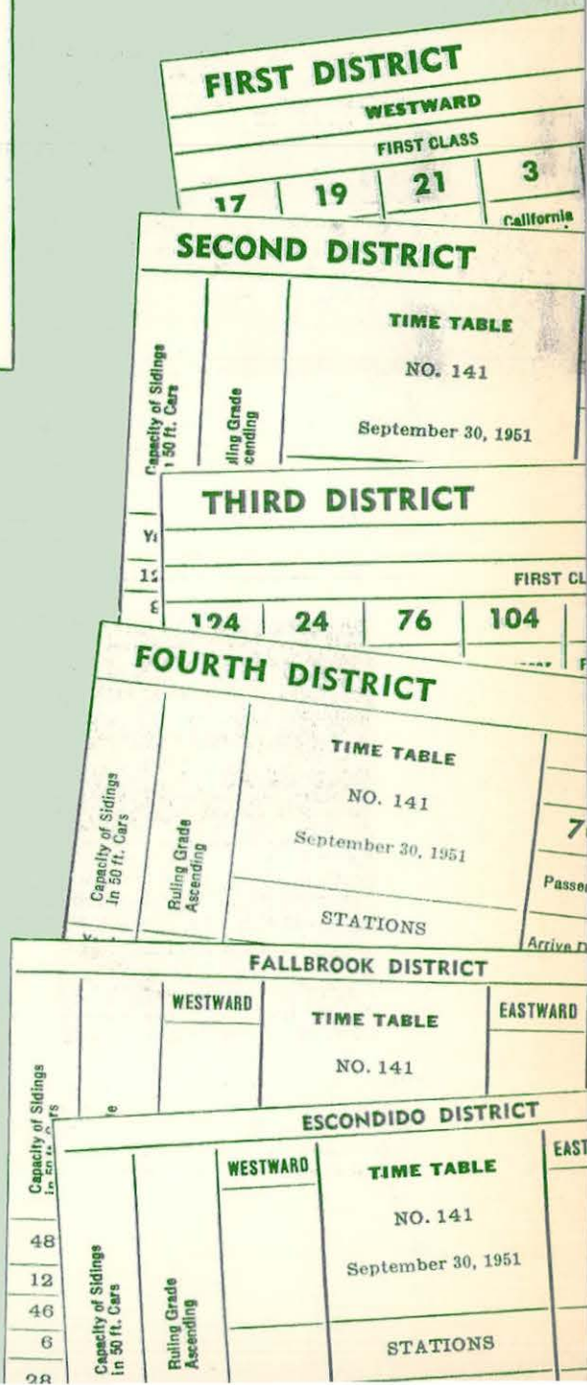
Railway Co.

FAIRBANKS-MORSE

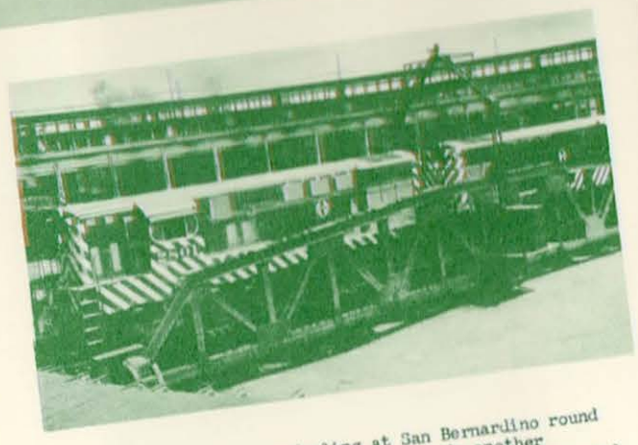
1600 Horsepower Locomotives

on the Los Angeles Division

The Santa Fe's 2800 series locomotives are used in general freight and yard service on every district



FAIRBANKS-MORSE 1600's on the SANTA FE *Symbol Train...*



On the Table ... after refueling at San Bernardino round house, Engines 2801 and 2803 swing towards another time freight run. Train 41V's consist of transcontinental freight is ready for fast scheduled delivery to Los Angeles.

At Top End of "A" Yard ... 3200 Opposed-Piston horsepower is coupled onto 41V's 4500 tons and starts it rolling to the Third District. At the same time, another team of F-M 1600's will MU the second SDX for San Diego.

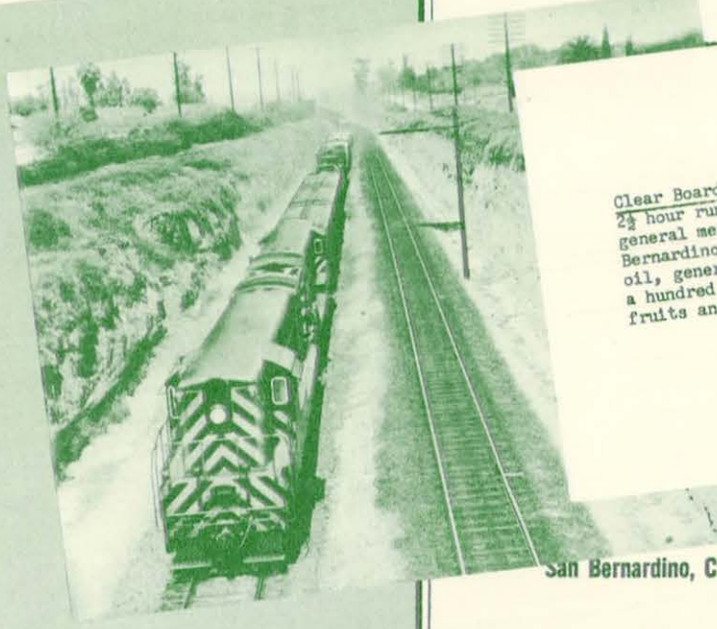
The Atchison, Topeka and Santa Fe Railway Co.

COAST Santa Fe LINES

LOS ANGELES DIVISION
AND
LOS ANGELES TERMINAL

TIME TABLE No.
141

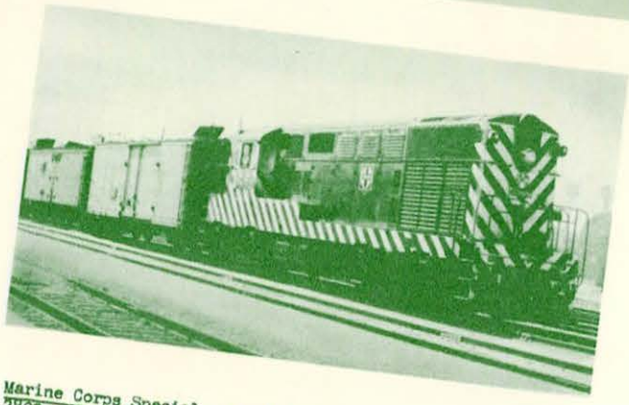
IN EFFECT



Clear Board to L.A. ... for a fast 2½ hour run with today's 66 cars of general merchandise. Returning San Bernardino, these units may start oil, general merchandise or one of a hundred varieties of California fruits and vegetables on the way east.

J. P. DONOVAN,
Superintendent,
San Bernardino, Cal. Los Angeles, Cal.

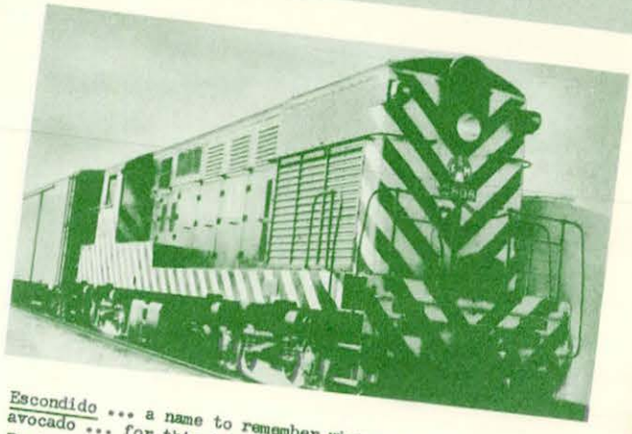
FAIRBANKS-MORSE 1600's on the SANTA FE
or Local Freight



Marine Corps Special .. could well be the name of Engine 2809. For this All-Purpose locomotive services the high-tonnage needs of the 97 square mile Marine Corps station ... Camp Pendleton. Permanently assigned at Oceanside, this unit provides ample reserve against peak traffic demand of the citrus season.

Out on Atwood Turn ... 2800 picks up local freight on the 3rd District. Another F-M 1600 goes over Cajon with a load and will switch the cement plant at Victorville. Week-ends are brighter for ice yard foreman when F-M power, quicker acceleration, better braking "cuts the buck" classifying fruit trains.

Reliable, Economical service with low maintenance cost



Escondido ... a name to remember when next you see an avocado ... for this is the U.S. center of the crop. Engine 2808 starts the avocado harvest on its eastward trip along with the lettuce and more than 1700 carloads of citrus during the year. In-bound, F-M power delivers needed crate lumber, feed, blooded cattle — over 1500 cars of general merchandise a year.

Hall 12 46 25M

Form

Santa Fe

(Insert Name of Railway Company)

MONTHLY LOCOMOTIVE UNIT INSPECTION AND REPAIR REPORT

....., 19..... Locomotive unit } Number..... Initials.....

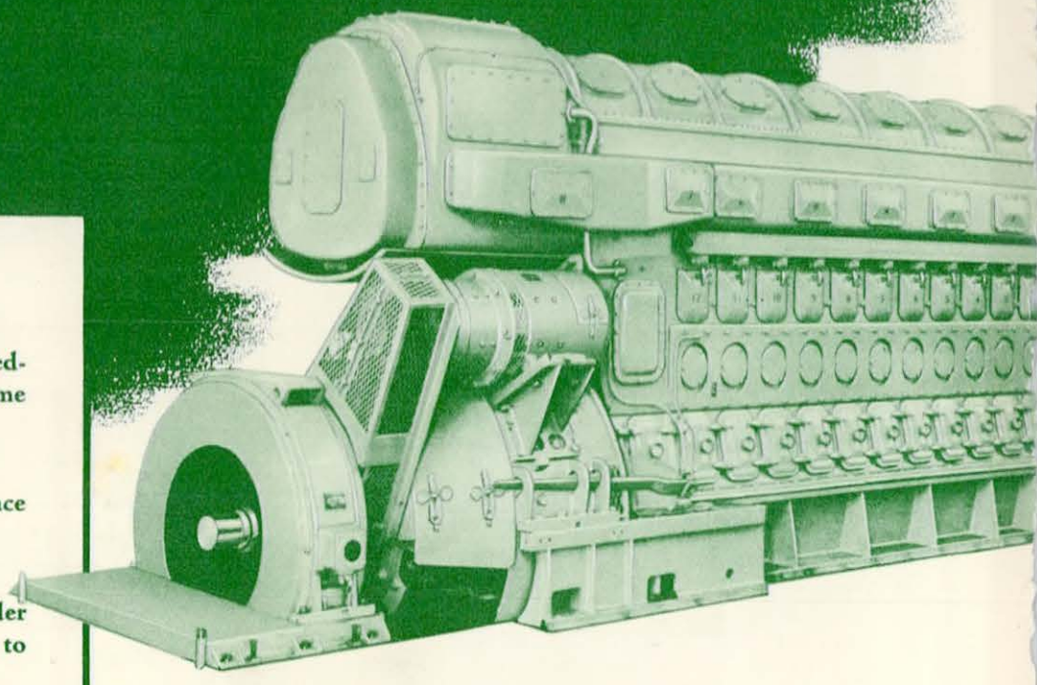
Operated by.....

In accordance with the act of Congress approved February 17, 1911, amended March 4, 1915, and June 7, 1924, instructions issued in pursuance thereof, the parts and appurtenances of locomotive unit No..... on....., 19....., at....., ... All defects disclosed by said inspection were except as noted on the reverse side of this report and the parts and appurtenances were left in the condition

1. This locomotive unit is propelled by.....
2. Hydrostatic test of..... pounds was applied to main air reservoirs.
   Date of previous test as shown by reports on file was.....
3. Were main air reservoirs hammer tested?.....
   Date of previous test as shown by reports on file was.....
4. Were drawbars and pins removed and inspected?.....
   ...revious removal as shown by stamping on the parts.....
   ... removed and inspected?.....

10. Date of previous insulation tests as shown by ... was....., 19.....
    Were insulation tests applied at this inspec...
    Name of circuit | Normal voltage
11. Condition of current collectors is.....
12. Condition of control equipment is.....

only FAIRBANKS-MORSE offers OPPOSED-PISTON DIESEL HORSEPOWER



Powered by any one of three great Opposed-Piston Diesel Engines, they all have the same basic advantages—

One Engine per Unit—far less floor space for shorter overall locomotive length.

2-Cycle Design—no valves, no cylinder heads. O-P engines have 40% fewer parts to wear—to maintain.

Low Fuel Consumption—plus new standards for reliability recorded by over 4,000,000 hp. in service.

Maximum Interchangeability of parts between all sizes of engines; lower investment required for repair and maintenance parts stock.

Maximum Accessibility—railroad men know that the Opposed-Piston engine can be serviced—even completely overhauled—far faster, to give minimum turn-around time.

Four Sizes—1200, 1600, 2000 and 2400 hp. Each is designed and built for its rated horsepower—not "rated" from lower limits.

Comparison with other locomotives shows the Opposed-Piston Engine, coupled with progressive overall locomotive design, assures the success of these Fairbanks-Morse Locomotives—and promises you high return in service on your road.

COMPARE... O.P. with all other Diesel Engines

Of all the components that make up a locomotive, the engine is of primary importance. Through its degree of fuel economy, reliability and ease of maintenance, it governs the success of the entire locomotive. This is largely why Fairbanks-Morse road freight, transfer and switching locomotives have been so rapidly adopted by railroads of every size, for every type of service.

FAIRBANKS-MORSE

a name worth remembering when you want the best

DIESEL LOCOMOTIVES AND ENGINES · ELECTRICAL MACHINERY · PUMPS · SCALES
HOME WATER SERVICE EQUIPMENT · RAIL CARS · FARM MACHINERY · MAGNETOS

(*Continued from page* 58)
bureau suggested, "may be compared with an increase of 0.5 per cent in the number of tons of revenue freight carried by Class I steam railways between the same periods."

Meanwhile, the "Comment" also presented a table of "selected revenue traffic statistics" of the Class I roads for the year's first half. Those data showed that freight traffic, as measured by revenue ton-miles, was down 5.1 per cent from the total for the first half of 1951. Freight revenue, however, was off only 0.1 per cent—$4,235 million, compared with $4,239 million.

Revenue passenger-miles of this year's first half were up 3.9 per cent from last year. Passenger revenue was up 6.7 per cent— $459.4 million, compared with $430.6 million.

Franklin Receives A.A.R. Research Contract

To investigate materials used in freight car axle bearings, the Association of American Railroads has awarded a two-year contract to the Franklin Institute Laboratories for Research and Development, at Philadelphia, according to Dr. Nichol H. Smith, director of the laboratories. The project will be under supervision of F. S. Chaplin, associate director in charge of mechanical engineering.

The research program will give special emphasis to obtaining the bearing material with the lowest friction through an investigation of differences in frictional properties of various materials, particularly when not sufficiently lubricated. A special machine will be developed by the laboratories to permit controlled tests under the desired combination of pressure, speed, temperature and oil supply.

The initial work will be concerned with investigation of existing materials, but later on special materials may be developed.

The emphasis of the program on friction, according to Mr. Chaplin, is indicated by the increase in occurrence of hot boxes during hot weather. This is said to suggest the possibility that a relatively small decrease in the temperature rise due to friction might result in a drastic reduction in number of hot boxes.

Carpi Urges Joint Oil-RR Fight Against Regulation

A united front of railroads and the oil industry to oppose encroachment of government regulation was proposed by Fred Carpi, traffic vice-president of the Pennsylvania, in an address before an Atlantic City, N.J., meeting of the Traffic and Transportation Group of the National Petroleum Association on September 11. "The railroad industry and the petroleum industry are both striving for the economic freedoms which we need in order to serve our customers

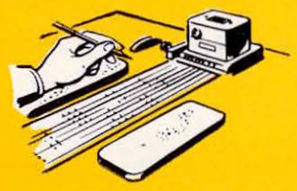
Photo cou
Canadian
Railway

PUT YOUR TROUBLES IN THE SAFEST HANDS..

(cost conscious)

More than 100 railroads put their rail testing problems in the hands of Sperry Rail Service to achieve:

1. **Maximum protection through frequent complete testing programs.**
2. **Lowest possible cost per defect detected, with highest efficiency.**



Sperry Detector Cars consistently find more and smaller defects than any other method, and at the lowest possible cost.

Induction Detector Car Service for testing rail in track

supplemented by

Ultrasonic Detector Car Service for testing rail inside joint bars, at crossings, and in tunnels.

Complete "End to End Testing" Service which assures you that *your problems* are in the *safest hands* with

SPERRY RAIL SERVICE

DIVISION OF SPERRY PRODUCTS, INC.

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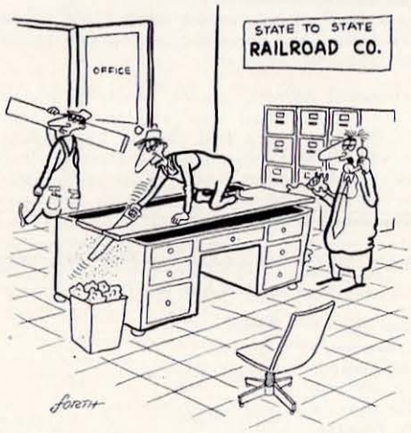

"QUIT WORRYING, GILMARTIN— I'LL HAVE THOSE TIES DOWN THERE IN TEN MINUTES!"

(*Continued from page* 58)
bureau suggested, "may be compared with an increase of 0.5 per cent in the number of tons of revenue freight carried by Class I steam railways between the same periods."

Meanwhile, the "Comment" also presented a table of "selected revenue traffic statistics" of the Class I roads for the year's first half. Those data showed that freight traffic, as measured by revenue ton-miles, was down 5.1 per cent from the total for the first half of 1951. Freight revenue, however, was off only 0.1 per cent—$4,235 million, compared with $4,239 million.

Revenue passenger-miles of this year's first half were up 3.9 per cent from last year. Passenger revenue was up 6.7 per cent— $459.4 million, compared with $430.6 million.

Franklin Receives A.A.R. Research Contract

To investigate materials used in freight car axle bearings, the Association of American Railroads has awarded a two-year contract to the Franklin Institute Laboratories for Research and Development, at Philadelphia, according to Dr. Nichol H. Smith, director of the laboratories. The project will be under supervision of F. S. Chaplin, associate director in charge of mechanical engineering.

The research program will give special emphasis to obtaining the bearing material with the lowest friction through an investigation of differences in frictional properties of various materials, particularly when not sufficiently lubricated. A special machine will be developed by the laboratories to permit controlled tests under the desired combination of pressure, speed, temperature and oil supply.

The initial work will be concerned with investigation of existing materials, but later on special materials may be developed.

The emphasis of the program on friction, according to Mr. Chaplin, is indicated by the increase in occurrence of hot boxes during hot weather. This is said to suggest the possibility that a relatively small decrease in the temperature rise due to friction might result in a drastic reduction in number of hot boxes.

Carpi Urges Joint Oil-RR Fight Against Regulation

A united front of railroads and the oil industry to oppose encroachment of government regulation was proposed by Fred Carpi, traffic vice-president of the Pennsylvania, in an address before an Atlantic City, N.J., meeting of the Traffic and Transportation Group of the National Petroleum Association on September 11. "The railroad industry and the petroleum industry are both striving for the economic freedoms which we need in order to serve our customers

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well," he added. "The difference is that in most cases you are trying to preserve some of your freedoms and we are trying to regain some of ours. May I suggest that possibly the best guarantee you oil men could have that more of your freedom will not be taken away would be a change in the tide of regulation of America's most regulated industry."

Mr. Carpi urged the oil men to support railroads' efforts to secure greater freedom in rate making, to discontinue unprofitable and unused passenger service, and to modernize and improve the Interstate Commerce Act.

"We are advocating an overhaul of national transportation policy by the next Congress," the PRR officer concluded, "and I hope we will have your support, and when I say support I mean something more than exhortations. But above and beyond these needs for legislative reform, I think the railroad industry and the oil industry have much to gain from an increasing understanding of each other's problems and viewpoints. The past record of the traffic men of your industry for understanding and the demonstrated concern of the oil industry's top management toward public and social responsibilities is a sound basis for the meeting of minds on all of these interests which are common to our business future. I shall welcome the opportunity at any time to sit down with your representatives and discuss these subjects in detail, and we shall welcome any reciprocal proposals for railroad support of your program to preserve or restore the economic freedoms that oil progress requires."

Section 20c May Not Apply To Non-Railroad Obligors

Division 1 of the Interstate Commerce Commission is considering the question of whether the Interstate Commerce Act's new section 20c contemplates the recording with the commission of equipment trusts on equipment operated on railroads "where others than railroads are the lessees or obligors."

This was revealed in a letter which the commission's acting secretary, G. W. Laird, wrote on September 10 to James E. Allison, president of the Warren Petroleum Corporation, Tulsa, Okla., who had submitted an equipment trust agreement for recording. Section 20c was enacted during the closing days of Congress' recent session. It sets up arrangements for filing with the commission, for recording purposes, of any equipment trust agreement, or other instrument evidencing the mortgage, lease, conditional sale, or bailment of railroad rolling stock (*Railway Age*, September 15, page 104).

The question as to whether instruments executed by non-railroad obligors are eligible for recording is a matter "now pending" before Division 1, Mr. Laird told Mr. Allison. The division "will welcome any views any persons interested in the lease may have to present on the question," the acting secretary added.

He went on to say that his letter was being made public because "there appears to be a general interest in this question." Thus, the views of "all interested parties" may be submitted "in writing, with an original and six copies, on or before September 25."

McDonald Heads N.P.A.

Richard A. McDonald has been appointed administrator of the National Production Authority, which is a unit of the Department of Commerce. He succeeds Henry H. Fowler, whose appointment as director of the Office of Defense Mobilization was noted in *Railway Age* of September 15, page 12.

Mr. McDonald has been associated with N.P.A. since last February, and he has been its acting director for the past month. He is on leave from his position as chairman of the executive committee of the Crown-Zellerbach Corporation.

Steel Shipments in First Half of 1952

Steel manufacturers whose production represents virtually the entire domestic output of finished rolled steel products shipped 32,968,625 net tons of steel products during the first six months of 1952, according to the American Iron & Steel Institute. The accompanying table presents the breakdown by market classification of first half 1952 steel shipments of 32,532,286 net tons and is based upon information supplied by the institute.

STEEL SHIPMENTS — FIRST HALF 1952

Market Classification	Net Tons	Percentage of total Shipments
Steel for converting & processing*	1,485,533	4.6
Forgings other than automotive	657,796	2.0
Bolts, nuts, rivets & screws	658,187	2.0
Jobbers	6,439,416	19.8
Construction, including maintenance:		
Rail transportation	49,288	0.2
Oil & gas	1,244,951	3.8
All other	2,648,106	8.1
Contractors' products	1,310,854	4.0
Automotive	4,793,018	14.7
Railroad rails, trackwork & equipment	861,451	2.6
Railroad cars & locomotives	1,168,055	3.6
Street railways & rapid transit systems	19,057	0.1
Shipbuilding & marine equipment	426,642	1.3
Aircraft	63,883	0.2
Oil & gas drilling	363,363	1.1
Mining, quarrying & lumbering	172,734	0.6
Agricultural	679,255	2.1
Machinery, industrial equipment & tools	1,939,077	6.0
Electrical machinery & equipment	802,400	2.5
Appliances, utensils & cutlery	660,364	2.0
Other domestic & commercial equipment	768,012	2.4
Containers	2,695,938	8.3
Ordnance & other military	955,935	2.9
Export	1,668,971	5.1

*Net total after deducting shipments to reporting companies for conversion or resale.

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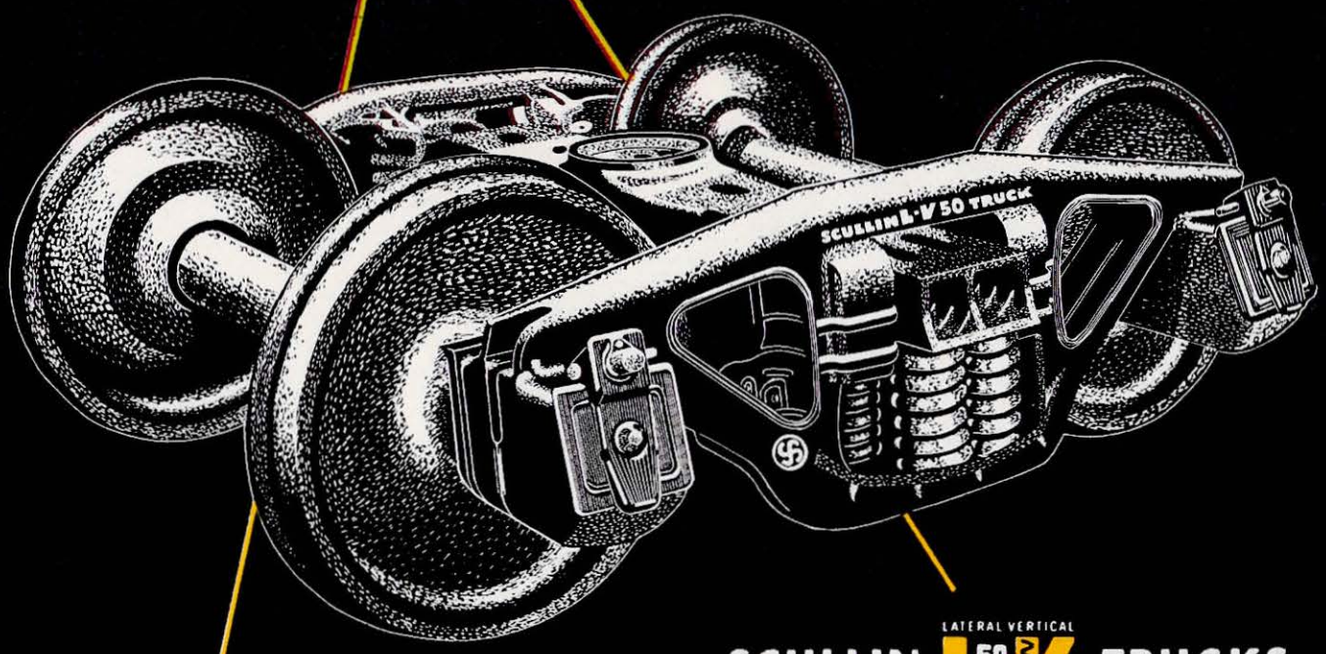

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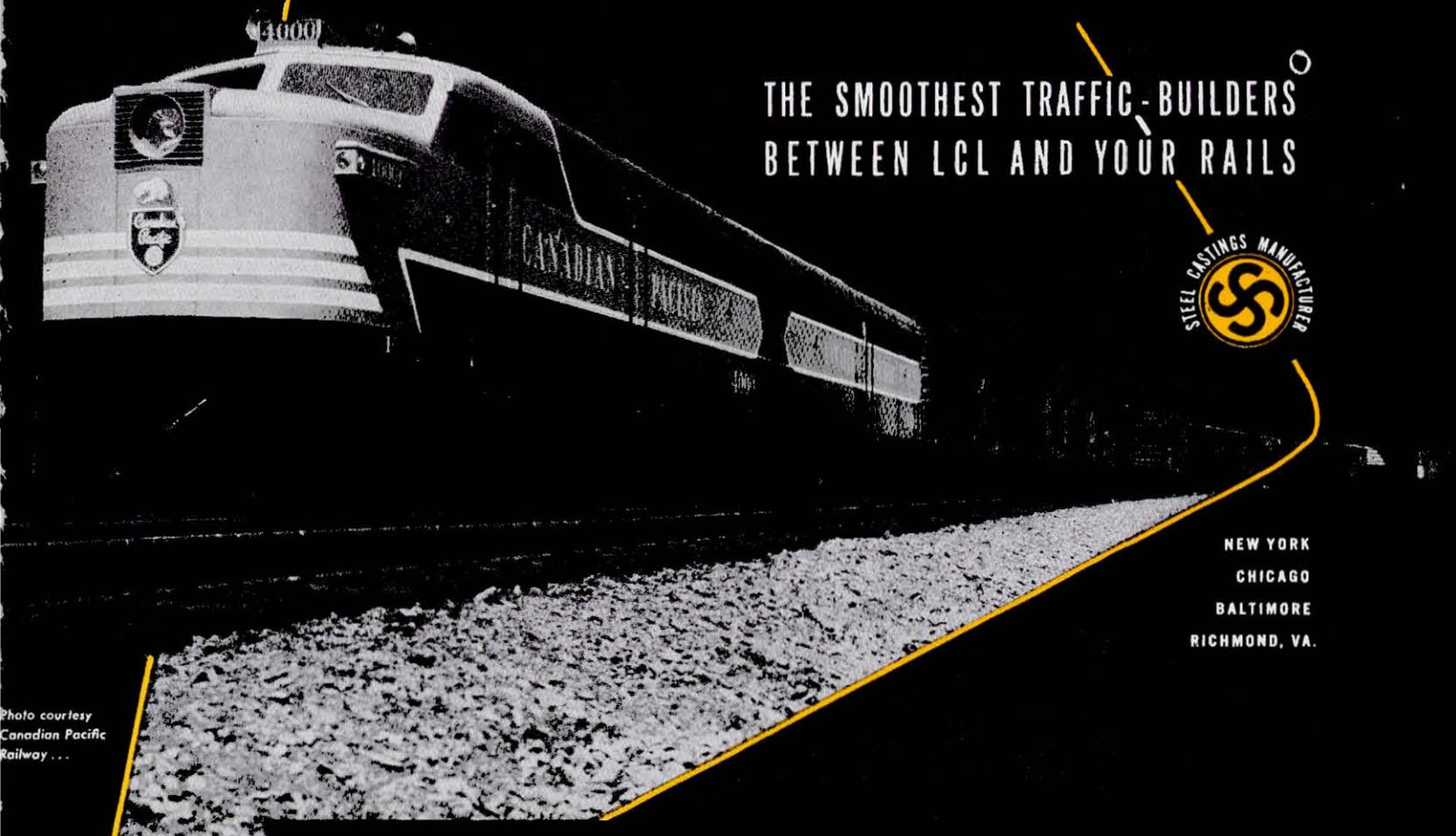

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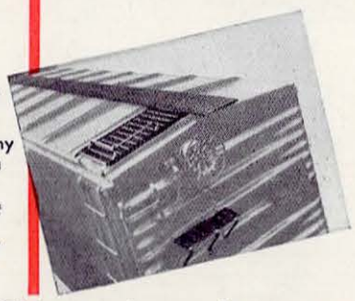

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Current Publications

PAMPHLETS

Glossary of Terms for Producers and Users of Iron Castings. 32 pages. International Nickel Company, Department EZ, 67 Wall st., New York 5. Free.

Explains over 150 technical terms that are used in common between suppliers and users of ferrous and non-ferrous castings. Should prove useful to the designer, machinist and purchaser of castings as well as to the man in a foundry.

Tabulation of Statistics Pertaining to Signals, Interlocking, Automatic Train Control, Telegraph and Telephone for Transmission of Train Orders, Spring Switches, and Train Communication Systems as Used on the Railroads of the United States, January 1, 1952. 35 pages. Bureau of Safety, Interstate Commerce Commission, Washington 25, D. C.

Contains statistics for individual railroads on the above mentioned subjects.

The Handbook of Motion Picture Technique for Business Men, by Charles Curran. 53 pages, illustrations. Times Square Productions, Inc., 145 W. 45th st., New York 36, N. Y. $1.

In order to assist industry executives, sales and advertising managers, and purchasing agents interested in producing films for personnel training, introduction of new products and processes, and sales promotion, Mr. Curran has compiled this handbook which explains motion picture production non-technically. Some of the subjects covered include kind of film needed, color vs. black and white, what the picture and script should cost, terms on which film productions are made, putting the film into production, some hazards of film production, and how to plan TV and business film production. It also includes a glossary of motion picture nomenclature.

1952 Film Library Catalogue. 96 pages. New York State Department of Commerce, Motion Picture Unit, 40 Howard st., Albany, N. Y. Free.

Lists by subjects films which are available without charge for use by industrial, commercial and business organizations, schools and educational institutions and other responsible organizations guaranteeing an audience of at least 50 persons. All films are 16-mm. sound unless otherwise indicated.

Employment Manual; A Guidebook for Officials and Supervisors Who Perform the Hiring Function. 8 pages, illustrations. New York Central System, Personnel department, 466 Lexington ave., New York 17. Free.

This booklet covers the essential steps that should be followed to perform the function of hiring new employees most effectively. These steps are pre-selection interview, application form, pre-employment interview, tests, pre-employment physical examination, investigation of references, fingerprinting of new employees, and orientation of new employees.

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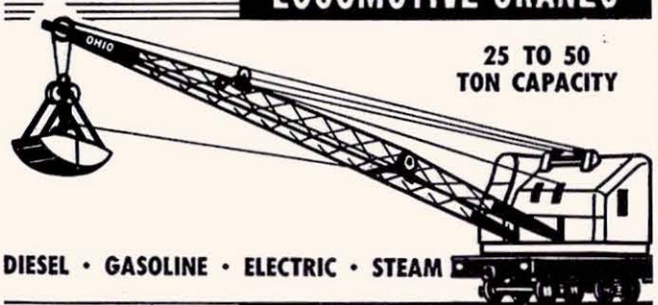

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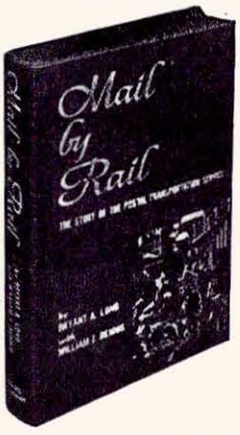

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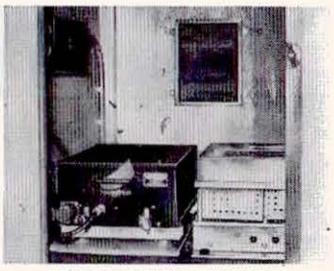

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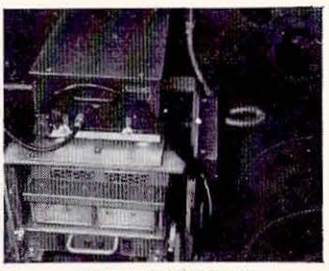

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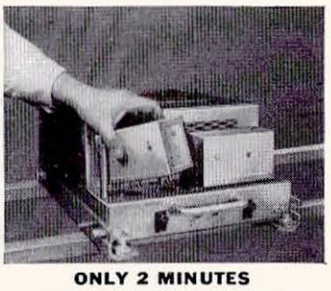

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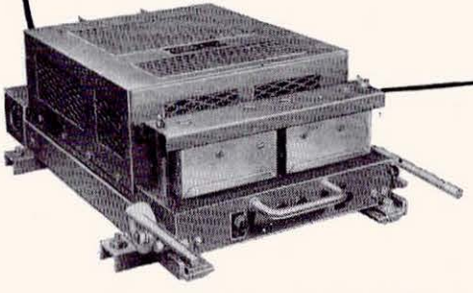

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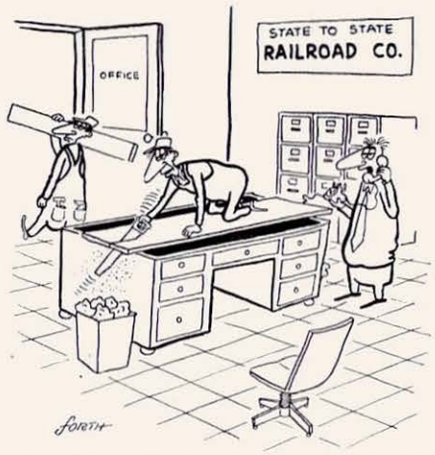

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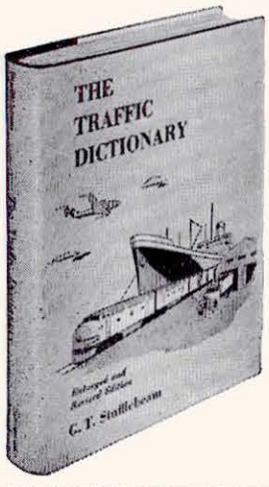

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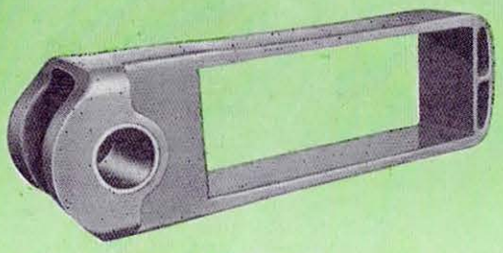

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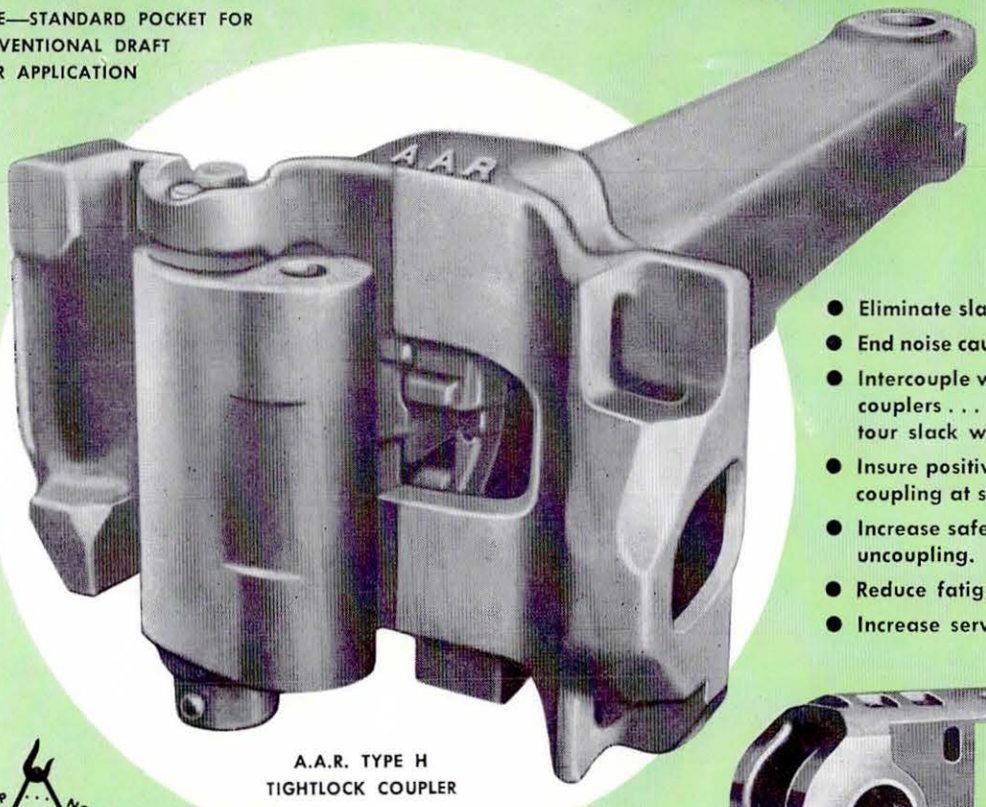

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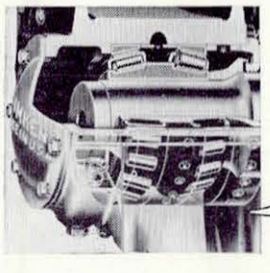

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